Catalogue no. 89-552-MIE — No.17
ISSN: 1480-9516
ISBN: 978-0-662-46779-3

International Adult Literacy Survey

Adult Learning in Canada: A Comparative Perspective

Results from the Adult Literacy and Life Skills Survey

by Kjell Rubenson, Richard Desjardins and Ee-Seul Yoon

Culture, Tourism and the Centre for Education Statistics Division
Main Building, Room 2001, Ottawa, K1A 0T6

Telephone: 1-800-307-3382 Fax: 1-613-951-9040

Statistics Canada Statistique Canada

Canada

How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website at www.statcan.ca or contact us by e-mail at infostats@statcan.ca or by phone from 8:30am to 4:30pm Monday to Friday at:

Toll-free telephone (Canada and the United States):	
Enquiries line	1-800-263-1136
National telecommunications device for the hearing impaired	1-800-363-7629
Fax line	1-877-287-4369
Depository Services Program enquiries line	1-800-635-7943
Depository Services Program fax line	1-800-565-7757
Statistics Canada national contact centre:	1-613-951-8116
Fax line	1-613-951-0581

Information to access the product

This product, catalogue no. 81-552-MIE, is available for free in electronic format. To obtain a single issue, visit our website at www.statcan.ca and select Publications.

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, the Agency has developed standards of service which its employees observe in serving its clients. To obtain a copy of these service standards, please contact Statistics Canada toll free at 1-800-263-1136. The service standards are also published on www.statcan.ca under About us > Providing services to Canadians.

2008-02978/

International Adult Literacy Survey

Adult Learning in Canada: A Comparative Perspective

Results from the Adult Literacy and Life Skills Survey

by Kjell Rubenson, Richard Desjardins and Ee-Seul Yoon

Published by authority of the Minister responsible for Statistics Canada

© Minister of Industry, 2007

All rights reserved. The content of this electronic publication may be reproduced, in whole or in part, and by any means, without further permission from Statistics Canada, subject to the following conditions: that it be done solely for the purposes of private study, research, criticism, review or newspaper summary, and/or for non-commercial purposes; and that Statistics Canada be fully acknowledged as follows: Source (or "Adapted from", if appropriate): Statistics Canada, year of publication, name of product, catalogue number, volume and issue numbers, reference period and page(s). Otherwise, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form, by any means—electronic, mechanical or photocopy—or for any purposes without prior written permission of Licensing Services, Client Services Division, Statistics Canada, Ottawa, Ontario, Canada K1A 0T6.

October 2007

Catalogue no. 89-552-XIE, no. 17

ISSN 1480-9516

ISBN 978-0-662-46779-3

Frequency: Irregular

Ottawa

Cette publication est disponible en français (N° 89-552-MIF au catalogue, n° 17)

Statistics Canada

Acronyms

ALL	Adult Literacy and Life Skills Survey
ETS	Educational Testing Service
IALSS	International Adult Literacy and Skills Survey
IALS	International Adult Literacy Survey
OECD	Organisation for Economic Co-operation and Development
NCES	National Center for Education Statistics
UNESCO	United Nation Educational, Scientific and Cultural Organization

Acknowledgements

This report was an effort made possible by the financial support of Statistics Canada. We are grateful to a number of reviewers for their comments: Yvan Clermont and Scott Murray of Statistics Canada; Urvashi Dhawan-Biswal, Ginette Gervais, and Diana Kaan of the Learning Policy Directorate at Human Resources and Development Canada; Brooke Besley, Marina Umeljic, Barbara Bekooy of the Learning Branch at LPPD; and from reviewers at Citizenship and Immigration Canada. We also extend a special thanks to Edith Greenlee and Danielle Baum of Statistics Canada for their work in preparing the report

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Table of contents

Acknowledgements		5
Introduction		9
	Adult learning in context	9
	Goals of the report	10
	What is ALL?	10
	Defining what counts as adult learning	11
	Organization of the report	13
Chapter 1.	**International, provincial and territorial comparisons of adult learning**	14
	1.1. Participation in organized forms of adult education and training	14
	1.2. Duration of participation in adult education and training	23
	1.3. Direct financial support for adult education and training	26
	1.4. Patterns of informal learning	32
Chapter 2.	**Adult learning: who is being left out?**	36
	2.1. Inequalities in organized forms of adult learning	36
	2.1.1. Adult literacy and participation	36
	2.1.2. Education and participation	41
	2.1.3. Parents' education and participation	43
	2.1.4. Age and participation	45
	2.1.5. Gender and participation	49
	2.1.6. Immigration and participation	50
	2.2. Inequalities in informal learning	53
	2.3. Vulnerable groups	57
Chapter 3.	**Adult learning and the world of work**	62
	3.1. Reasons for participating in courses and programmes	62
	3.2. Labour force status and participation in adult education and training	64
	3.3. Impact of job and workplace characteristics on adult learning	65
	3.4. Skill use and participation in adult learning	67
	3.5. Skill match-mismatch and participation in adult learning	68

Table of contents

Conclusions		**75**
	Overview of main findings	75
	Discussion	76
References		**79**
Annex A	**Data values for the charts**	**82**
Annex B	**Supplementary data tables**	**97**
Note		**104**

Tables

Table 1.1	Engagement in various informal learning activities in Canada	35
Table 2.1	Likelihood of participating and participation rates in organized forms of adult learning by literacy	40
Table 2.2	Likelihood of participating in organized forms of adult learning by education	42
Table 2.3	The compounding intergenerational effect of education on adult learning	44
Table 2.4	Likelihood of participating in organized forms of adult learning by age	45
Table 2.5	Likelihood of participating in organized forms of adult learning by age in Canada	46
Table 2.6	Likelihood of participating and participation rates in organized forms of adult learning by gender	49
Table 2.7	Participation rates in organized forms of adult learning by gender	50
Table 2.8	Likelihood of participating and participation rates in organized forms of adult learning by immigration status	51
Table 2.9	Likelihood of participating and participation rates in organized forms of adult learning by immigration status in Canada	52
Table 2.10	Engagement in various informal learning activities by literacy	54
Table 2.11	Engagement in various informal learning activities by age	56
Table 2.12	Participation in adult education and training and vulnerable groups	60
Table 3.1	Likelihood of participating and participation rates in employers-sponsored adult education and training by work characteristics	66

Table of contents

Charts

Chart 1.1	Participation rates in organized forms of adult learning	15
Chart 1.2	Comparison of participation rates between the IALS and ALL survey	16
Chart 1.3	Distribution of educational attainment in Canada	18
Chart 1.4	Distribution of document literacy in Canada	18
Chart 1.5	Distribution of labour force status in Canada	20
Chart 1.6	Distribution of occupational types in Canada	21
Chart 1.7	Participation rates in organized forms of adult learning in Canada	22
Chart 1.8	Changes in participation between the IALS and ALL survey periods	23
Chart 1.9	Annual mean hours of study per participant and per capita	24
Chart 1.10	Annual mean hours of study per participant in Canada	25
Chart 1.11	Sources of financial support for adult learning by gender	27
Chart 1.12	Comparison of sources of financial support between the IALS and ALL survey	28
Chart 1.13	Sources of financial support for adult learning by literacy	29
Chart 1.14	Sources of financial support for adult learning in Canada	30
Chart 1.15	Comparison of sources of financial support between the IALS and ALL survey	31
Chart 1.16	Engagement in various informal learning activities	34
Chart 2.1	Participation rates in organized forms of adult learning by literacy	37
Chart 2.2	Likelihood of participating in organized forms of adult learning by literacy	38
Chart 2.3	Changes in participation between the IALS and ALL survey periods by literacy	39
Chart 2.4	Participation rates in organized forms of adult learning by education	41
Chart 2.5	The compounding intergenerational effect of education on adult learning in Canada	44
Chart 2.6	Participation of older Canadian adults in adult education and training	48
Chart 2.7	Engagement in at least one type of informal learning activity	53
Chart 3.1	Reasons for participating in adult education and training	62
Chart 3.2	Reasons for participating in adult education and training by job tenure	63
Chart 3.3	Participation in adult education and training by labour force status	64
Chart 3.4	Comparison of participation rates by labour force status between the IALS and ALL survey	65
Chart 3.5	Likelihood of participation by literacy practices at work	68
Chart 3.6	Comparison of match- mismatch between skills and skill use at work between the IALS and ALL surveys	69
Chart 3.7	Match-mismatch between skills and skill use at work by type of occupation	70
Chart 3.8	Match-mismatch between skills and skill use at work by immigration status	71
Chart 3.9	Match-mismatch between skills and skill use at work by participation in adult education and training	72
Chart 3.10	Match-mismatch between skills and skill use at work by participation in employer-sponsored adult education and training	73
Chart 3.11	Match-mismatch between skills and skill use at work by engagement in informal learning	74

Introduction

Adult learning in context

OECD's thematic review of adult learning policies and practices in 17 OECD countries found a growing recognition by policy makers of the necessity to invest in adult learning to achieve economic efficiency and address equity deficiencies (OECD, 2005a, p. 15). This trend is driven by advances in information and communication technologies, and reduced trade barriers. Industrial countries are undergoing a period of fundamental economic transformation in which knowledge and information is being promoted as the foundations for economic activity. In Canada, the recently released *Plan for Growth and Prosperity* notes that brainpower has become the fundamental basis of competitive advantage. *"Knowledge and creativity have become the true measures of economic potential"* (Government of Canada, 2005, p. 8).

While there has been an awareness of the relationship between increased years of schooling and economic growth since the 1961 ground-breaking report, *Education as Investment* (OECD, 1961), the role of adult learning on productivity, innovation and employment chances of individuals (OECD, 2004; OECD, 2005a) has only recently come to the fore.

The urgency of addressing adult learning is being heightened by dramatic demographic changes. The rapid aging of the Canadian population creates a major challenge to prosperity. Today, the ratio of Canadians of working age to persons of retirement age is just above five to one but is projected to fall to four to one within 15 years and to less than 2.5 to one by 2050. With a decreasing inflow of young and highly skilled people into the labour market, productivity gains become increasingly dependent on continuous retraining of the existing workforce, who may be encouraged to remain gainfully employed beyond today's retirement age.

According to the policy rhetoric, the *New Economy* holds the promise of increased productivity and an improved standard of living. However, it also introduces a new set of transitions and adjustment challenges for society, industry, and individuals, which have the potential to increase the permanent exclusion or marginalization of segments of the population and exacerbate socio-economic divisions (Rubenson and Schuetze, 2000). The premise that a *general* demand for a better skilled labour force exists, is being questioned by scholars who point to a growing bifurcation of the labour market (Brown, Green & Lauder, 2001; Livingstone, 2005). Those that see adult learning as part of a response to the danger of further polarization in society argue that lifelong learning gives citizens the chance to acquire adequate skills to prevent low-paid jobs from becoming life cycle traps. *"A Pareto optimal welfare state of the future might very well be one that shifts the accent of social citizenship from its present preoccupation with income maintenance towards a menu of rights to lifelong learning and qualification"* (Epsing-Andersen, 1996, p. 260).

From this perspective it is worth noting that recent research suggests that a more equitable investment in skills enhances overall labour force productivity (Coulombe, Tremblay, & Marchand, 2004; Statistics Canada, 2004). Consequently, addressing unequal opportunities to adult learning is as much an economic as a social issue.

Goals of the report

The purpose of this report is to describe the extent of adult learning in a comparative perspective. The goal is to present a comprehensive portrait of adult learning including participation in organized forms of adult learning (formal and non-formal learning) as well as informal learning. The report addresses differences in participation between selected countries and within Canada and notes changes in participation patterns. Findings from the 2003 Adult Literacy and Life Skills Survey are, when appropriate, compared to results from the 1994-1998 International Adult Literacy Survey.

Previous research has repeatedly documented the unequal readiness to engage in adult learning, particularly organized forms of learning (see e.g. OECD, 2000; Statistics Canada, 2001a). In this context, the report explores if the increased importance awarded to adult learning is reflected in more equitable distribution of adult learning across the Canadian population. Special focus is given to the readiness to engage in learning among those with restricted literacy capabilities and older adults.

Over the last two decades participation in adult learning has increasingly been mediated by factors related to the world of work. The report explores if there are any changes to this pattern and observes the relative importance of the state, employer and individual in the direct financing of adult learning.

Better knowledge of changes in adult learning patterns including the barriers and motivations to engagement in adult learning is critical to future policy development in the area. The information in this report provides a starting point. Further research, data collection and analysis are required to draw a more complete picture.

What is ALL?

The Adult Literacy and Life Skills Survey (ALL) is a large-scale co-operative effort undertaken by governments, statistical agencies, research institutions and intergovernmental agencies that provides international comparable measures on adult learning and four skill domains: prose and document literacy, numeracy and problem solving (for further details see Box 1, and OECD/ Statistics Canada, 2005). ALL was administered in 2003 in Canada, Bermuda, the Mexican State of Nuevo Leon, Italy, Norway, Switzerland and the United States. In Canada, over 23,000 individuals aged 16 and over from across the ten provinces and three territories responded to the survey. The Canadian component of ALL is known as the International Adult Literacy and Skills Survey (see Statistics Canada, 2005).

The ALL study builds on the International Adult Literacy Survey (IALS), the world's first internationally comparative survey of adult skills undertaken in three rounds of data collection between 1994 and 1998. Most questions on the background questionnaire in ALL were kept the same as in IALS so as to allow for comparisons to be made over time, as were the proficiency scales for two of the skill domains: prose literacy and document literacy.

Box 1
The Adult Literacy and Life Skills Survey (ALL)

The development and management of the ALL study were co-ordinated by Statistics Canada and the Educational Testing Services (ETS, Princeton, United States) in collaboration with the National Center for Education Statistics (NCES) of the United States Department of Education, the Organization for Economic Co-operation and Development (OECD) and the Institute for Statistics (UIS) of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Administered in 2003, ALL required all participating countries to collect data from a nationally representative sample of at least 3,000 respondents aged 16 to 65 for each language tested - English and French in the case of Canada. The minimum sample requirements for the ALL study were exceeded in Canada because several federal agencies and provincial governments funded the collection of additional cases so as to ensure high reliability in the estimation of data values for small population groups. Moreover, unlike the 1994 Canadian component of the International Adult Literacy Survey (IALS), the 2003 Canadian International Adult Literacy and Skills Survey (IALSS) also benefited from contributions made by territorial governments. As a result, the number of respondents is sufficient to provide accurate estimates for the Yukon, the Northwest Territories and Nunavut. Finally, as with the 1994 Canadian component of IALS, the 2003 IALSS added Canadians over the age of 65 to the sample. Over 23,000 individuals from across Canada spent an average of two hours responding to the IALSS.

Defining what counts as adult learning

In accordance with the principles of lifelong learning the ALL study recognizes three basic categories of settings where purposeful learning activity takes place (see EC, 2000; 2001):

> **Formal learning**: learning that typically takes place in an education or training institution, is structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner's perspective.
>
> **Non-formal learning**: learning that occurs in a context which is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning opportunities may be provided in the workplace and through the activities of civil society organizations and groups. Non-formal learning is intentional from the learner's perspective.
>
> **Informal learning**: learning that results from daily life activities related to work, family, community or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but is often non-intentional (or "incidental"/random).

In this report, formal and non-formal learning are referred to as organized forms of learning and encompass what is referred to as adult education and training. This is in contrast to informal learning which is seen as a non-organized form of learning. Data on education and learning in ALL were collected as part of a module entitled *Participation in Education and Learning*. All respondents were asked the first question in the module as follows:

> The next questions are about your participation in **education and learning** activities during the last 12 months, that is, from ... to ...

> During this time, did you take any education or training? This education or training would include programmes, courses, private lessons, correspondence courses, workshops, on-the-job training, apprenticeship training, arts, crafts, recreation courses or any other training or education? (yes/no)

Responses to this question are used to derive the total participation rate in adult education and training. Subsequent questions allow for a more detailed estimation of participation in programmes, courses and in other forms of organized learning. Additional information is used however to arrive at a refined distinction of what counts as adult education and training. According to the UNESCO definition, *adult education* consists of organized, structured programmes of education adapted to the needs of persons 15 and older who are not in the regular school or the university system. This definition excludes students who are still involved in their first or initial cycle of education. However, it has become increasingly difficult to maintain this definition and separate adult learners from first time students attending regular school or university. The traditional pattern of study has changed and with an increasing number of students moving in and out of the educational system and the labour market it is difficult to identify who is in the first cycle of studies and who is a recurrent learner. While recognizing the problems with defining who is an adult learner various pragmatic solutions are being sought.

For the purposes of the analysis in this report, adults aged 16 and older who are studying full time are not counted toward the participation rate in adult education and training, except under the following circumstances: adults aged 16 or over who are studying full-time and this is subsidized by an employer; adults aged 20 or over who are studying full-time in elementary or secondary programmes; and adults aged 25 or over who are studying full-time in postsecondary programmes. Thus any part time studies count toward adult learning. Moreover, higher education studies (full or part time) by adults aged 25 or over also count toward adult learning.

In general, it is difficult to obtain reliable data to do comparative analyses over time. Among other issues, one has to be certain that what is being measured is the same over time. While IALS and ALL were explicitly designed to allow for comparisons of literacy profiles over time, there were changes to the background questionnaire, including the module on adult learning. The questions used to derive total participation rates in organized forms of adult learning are nearly identical, but there are slight variations.

In IALS, all respondents were asked the first question of the module entitled ***Adult Education***:

> The following questions will deal with any **education or training** which you may have taken in the past 12 months.
>
> During the past 12 months, that is, since ..., did you receive any training or education including courses, private lessons, correspondence courses, workshops, on-the-job training, apprenticeship training, arts, crafts, recreation courses or any other training or education? (yes/no)

A comparison of the two filter questions in IALS and ALL shows a shift in emphasis from *Adult Education* to *Education and Learning*, and from *education or training* to *education and learning*, as well the inclusion of *programmes* among the list of examples in the question. These minor variations may contribute to higher observed participation rates for organized forms of adult learning in ALL as the latter is more likely to have captured students in formal programmes as well as some education and learning that is of a less organized nature such as some forms of on-the-job training. It is important to bear this in mind when comparing any changes over time in the rate of participation in adult education and training which are based on data from the IALS and ALL surveys.

Another complicating factor in comparing ALL and IALS is that while ALL distinguishes between participation in courses and programmes a significant number of those that identified themselves as participants in ALL did not report enrolling in a course and/or a programme. These persons are grouped under the heading "other". Unfortunately, ALL does not provide any information on what kind of education and training is covered under this category. It is likely that "other" refers to activities like attending short lectures, seminars or workshops that were not part of a course. There is no information on how extensive the training was, but it seems reasonable to assume that it was primarily of a short duration. A structural analysis of background information reveals that those who participated in "other" are more similar in their educational attainment, level of literacy skills and work characteristics to participants in programmes and/or courses than they are to non-participants (see Table B1.1 in Annex B). Because of the uncertainties surrounding the category "other" the comparisons of participation in ALL and IALS are reported two ways; with or without those that participated in "other".

The ALL study also collected data on informal learning. Cross-national comparable data on informal learning are rare, and ALL was one of the first attempts to collect this type of information. Analyses related to this form of adult learning are reported separately throughout.

Organization of the report

The **Introduction** briefly sets the analysis presented in this report in context. It introduces the ALL and IALS studies, and outlines the definition of adult learning used in this report.

Chapter 1 entitled *International, provincial and territorial comparisons of adult learning* provides comparative estimates of participation in adult education and training courses and programmes, duration of studies, engagement in informal learning and sources of direct financial support. Comparisons are made between Canada and three selected countries, namely Norway, Switzerland and the United States, as well as between the Canadian provinces and territories.

Chapter 2 entitled *Adult learning: Who is being left out?* compares the level of inequality in Canada and selected countries as well as across Canada. Comparing the findings in IALS and ALL, the chapter attempts to look at changes in the degree of inclusiveness.

Chapter 3 entitled *Adult learning and the world of work* first examines the reasons for participating in adult education and training. This is followed by an examination of the impact of labour force status as well as job and workplace characteristics on participation in adult education and training. The final section presents a review of the relationship between actual skill use and participation in both organized and informal forms of adult learning.

The **Conclusion** briefly sums up the main findings and conclusions of this report.

Chapter 1

International, provincial and territorial comparisons of adult learning

This chapter compares adult learning in the ten provinces and three territories in terms of participation in organized forms of adult learning, duration of studies, sources of direct financing and engagement in informal learning. It situates Canada internationally by comparing Canada to three of the six other countries which participated in the 2003 ALL, namely Norway, Switzerland and the United States. Bermuda, the Mexican State of Nuevo Leon and Italy are not included in the comparisons presented in this report because of their different economic structures.

1.1. Participation in organized forms of adult education and training

International comparisons

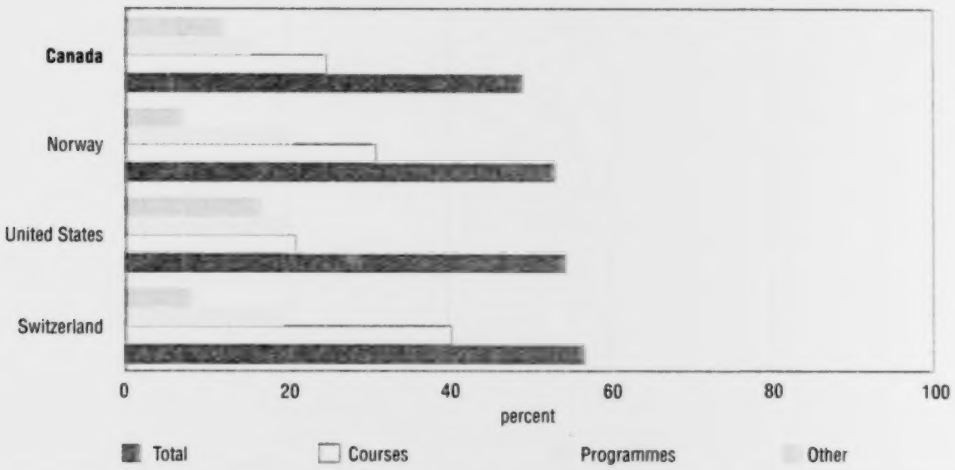
ALL distinguishes between participation in courses and programmes. As reported above a significant number of those that identified themselves as participants did not report enrolling in a course and/or a programme. These persons are grouped under the heading "other". It is likely that "other" refers to activities like attending short lectures, seminars or workshops that were not part of a course.

The results presented in Chart 1.1 shows a broad acceptance of the principles of lifelong learning in Canada and other countries who participated in ALL. Including participation in "other" close to or over half of adult populations were enrolled in organized forms of adult learning during the year preceding the interview. The overall participation rate in Canada (49 percent) is somewhat lower than in Norway (53 percent), the United States (55 percent) and Switzerland (57 percent).

Chart 1.1

Participation rates in organized forms of adult learning

Percent of population aged 16 to 65 participating in courses, programmes and other forms of adult education and training during the year preceding the interview, Canada and selected countries, 2003



Countries are ranked by the total adult education and training participation rate.

Source: Adult Literacy and Life Skills Survey, 2003.

The participation rate in programmes varies little among the four countries – from a low of 16 percent in Canada to a high of 21 percent in Norway. Thus, disparities in overall country participation rates are driven by the rate of participation in courses and "other" forms of training. The rate of participation in courses varies from a low of about 20 percent in the United States to a high of 40 percent in Switzerland. The comparatively low rate in the United States and, to some extent also in Canada, may be related to the fact that Americans (17 percent) and Canadians (12 percent) report a high rate of participation in "other" forms of training (workshops, etc.) which, as discussed above, may be of a very short duration.

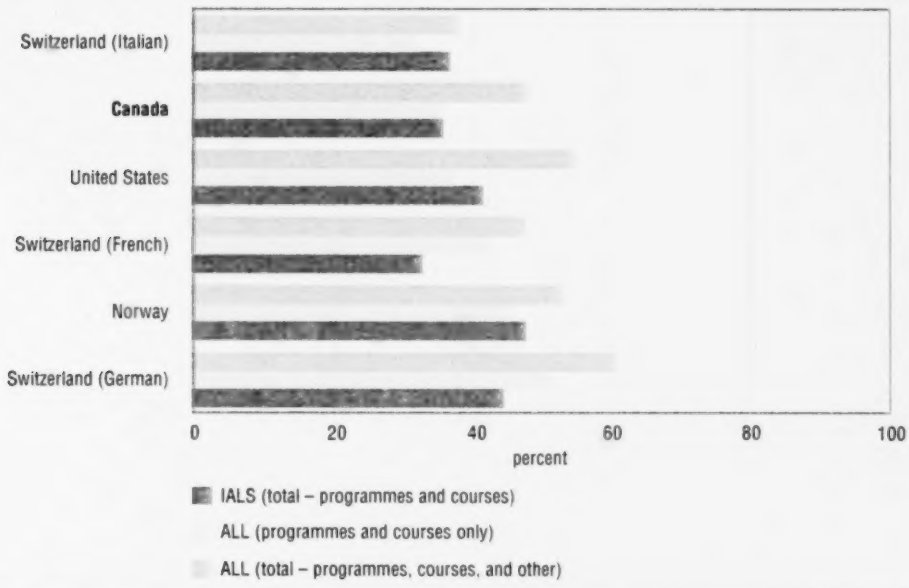
A comparison between participation rates in IALS and ALL provides an indication of the extent to which the increased importance awarded to adult learning by policy makers, the business community, trade unions and some academics, corresponds to any sizeable increases in participation rates. When contrasting the rates derived from IALS in 1994 (Norway and the Italian speaking community in Switzerland participated in IALS in 1998) and ALL in 2003 it is important to keep in mind that there are some differences in how the questions are constructed which may have affected the results (see discussion in Introduction).

Recognizing the problems that may be present in making comparisons over time, Chart 1.2 presents two different estimates for total participation, one that includes the category *"other"* and a second that excludes the category "other".

Chart 1.2

Comparison of participation rates between the IALS and ALL survey

Percent of population aged 16 to 65 receiving adult education and training during the year preceding the interview, with and without other forms included for ALL, Canada and selected countries, IALS 1994-1998 and ALL 2003



Countries are ranked by the adult education and training participation rate (without other) in 2003.

Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS in 1994, while Norway and the Italian speaking community of Switzerland participated in IALS in 1998.

To allow for comparisons between participation rates in IALS and ALL, the calculations for this analysis exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

In ALL, it is possible to derive three categories of adult education and training, namely programmes, courses and a residual category called "other". In IALS there was no possibility for a residual category – all responses were either programmes and/or courses. This is due to a technical design change from IALS to ALL in the adult education module. The implications of this technical change on the comparability of the estimates from 1994 to 1998 to 2003 are not clear. Are the responses to "other" in 2003 picking up something that was not being picked up in 1994 to 1998 (i.e., less formalized modes of adult learning) or were these responses forced into programmes and/or courses in 1994? Given this limitation, both are presented as a possiblity and caution is advised when comparing the estimates between the two surveys.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

Chart 1.2 shows that if category "other" is included in the total participation rate then there is a substantial increase in the percent of the population that identifies themselves as participants in organized forms of adult learning. In the German and French speaking communities of Switzerland, participation in adult education and training is 15 percentage points higher in 2003 compared to 1994. This is a boost of 37 and 45 percent respectively. Similarly, Canada and the United States increased adult participation by 37 and 30 percent respectively, which corresponds to a rise in participation rate of approximately 10 and 12 percentage points respectively. Norway experienced a slower rate of increase, rising only eight percent between the 1998 and 2003 surveys, which accounts for an additional four percentage points of the adult population aged 16 to 65. This might be expected, as Norwegian participation rates in IALS were among the highest of the countries studied. During the same period, the level of participation decreased slightly in the Italian-speaking community of Switzerland.

The picture is less rosy if category "other" is excluded from the total participation rate. As it can be seen in Chart 1.2, under this condition only minor variations can be observed in participation rates between IALS and ALL. In fact, it is only Switzerland that can register any noticeable increase in the participation rate, which went from 42.1 percent in IALS to 46.1 percent in ALL. In the Unites States, there even occurred a decrease from 41.7 to 37.7 percent.

Provincial and territorial comparisons

Previous surveys have noted substantial regional variations in participation in adult education and training (Statistics Canada, 2001a). These differences reflect broader economic and educational disparities and differences in government policy. Some provinces choose to offer a small amount of training to a large number of individuals whereas others offer a large amount of training to a small number of individuals.

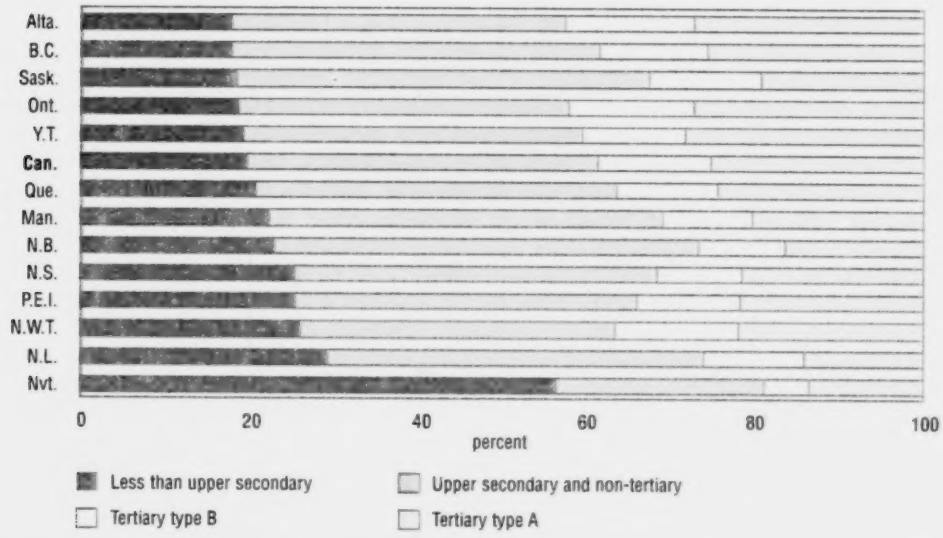
Chart 1.3 exposes the extent of regional discrepancies in educational attainment. In Nunavut over half of the adult population (56 percent) between the ages 16 to 65 have not completed upper secondary education as compared to a Canadian average of 20 percent. The share of highly educated, those who have completed bachelor degree or higher, is particularly high in the Yukon, Ontario, Alberta and British Columbia. In New Brunswick, Newfoundland and Labrador, and Nunavut, the proportion slips to ten percentage points below the average.

The regional educational differences are reflected in an uneven distribution of literacy skills across Canada. Chart 1.4 presents the percent of the population at proficiency Levels 1 and 2 on the document literacy scale. Level 3 is considered to be the desired threshold and reflects a minimum skills level to be able to be a fully functioning member of the emerging knowledge society (see Box 2).

Chart 1.3

Distribution of educational attainment in Canada

Percent of adults at each level of educational attainment, population aged 16 to 65, Canada and jurisdictions, 2003



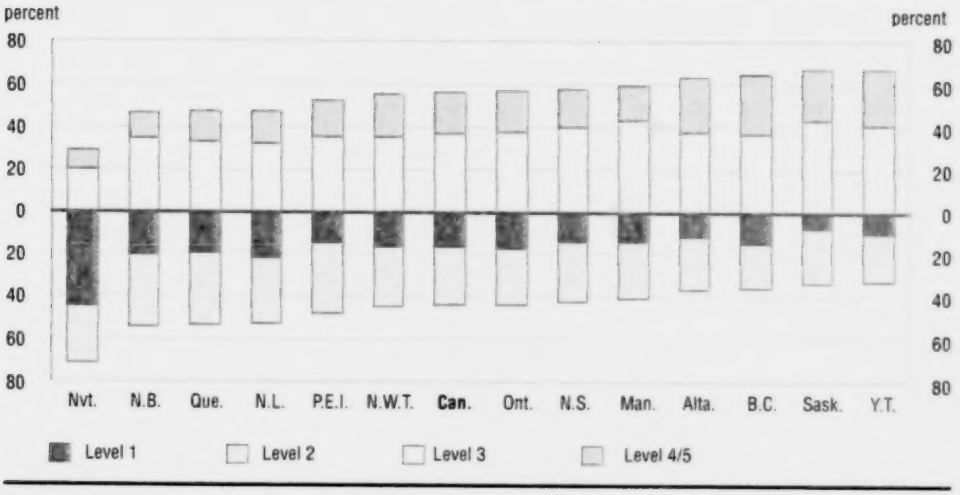
Jurisdictions are ranked by the proportions who completed less than upper secondary.

Source: Adult Literacy and Life Skills Survey, 2003.

Chart 1.4

Distribution of document literacy in Canada

Percent of adults at each level of document literacy, population aged 16 to 65, Canada and jurisdictions, 2003



Jurisdictions are ranked by the proportions in Levels 1 and 2.

Source: Adult Literacy and Life Skills Survey, 2003.

Box 2
Defining and measuring literacy skills in IALS and ALL

Like IALS the ALL defines skills along a continuum of skill proficiency. There is no arbitrary standard distinguishing adults who have or do not have skills. For example, many previous studies have distinguished between adults who are either "literate" or "illiterate". Instead, the ALL study conceptualizes proficiency along a continuum and this is used to denote how well adults use information to function in society and the economy.

The ALL employed the same methodology as in IALS to measure skill proficiency. There were two literacy skill assessment domains in both surveys. They are:

- Prose literacy – the knowledge and skills needed to understand and use information from texts including editorials, news stories, brochures and instruction manuals.
- Document literacy – the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables and charts.

For each domain, proficiency is denoted on a scale ranging from 0 to 500 points. Each score denotes a point at which a person has an 80 per cent chance of successfully completing tasks that are associated with a similar level of difficulty. Experts have defined five broad levels of difficulty for the prose and document literacy domains, each corresponding to a range of scores. Level 3 is considered by experts as a suitable minimum level for coping with the increasing demands of the emerging knowledge society and information economy (OECD and Statistics Canada, 1995). See OECD/ Statistics Canada (2005) for further details.

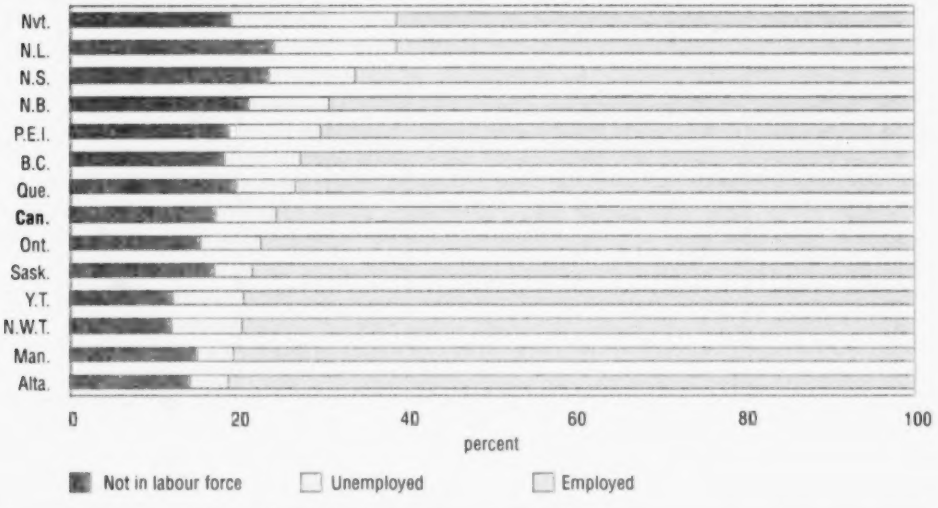
Citizens of the Yukon stand out with only 33 percent performing below Level 3. British Columbia, Alberta and Saskatchewan also have a relatively skilled population. The situation is dramatically different in Nunavut where close to 3 out of 4 score below Level 3. It should be noted that many Inuit do not speak either English or French but were tested in either of these two languages. Quebec, New Brunswick and Newfoundland and Labrador also have relatively large segments of the population (53 to 54 percent) at Levels 1 and 2.

Another factor that affects the distribution of adult learning is the labour market situation which varies drastically across Canada, see Chart 1.5. Nunavut and Atlantic Canada, particularly Newfoundland and Labrador, and Nova Scotia, are characterized by low levels of employment (60 to 70 percent range), a relatively large share of the population not in the labour force and high unemployment rates. At 20 percent, unemployment is particularly severe in Nunavut. In contrast, in Alberta, the Northwest Territories and the Yukon there is about 80 percent of the population that is employed. Where employment levels are low employers have their choice of employees, a fact that reduces their incentives to train and that allows them to select workers that already have the skills they need, including literacy skills.

Chart 1.5

Distribution of labour force status in Canada

Percent of adults in each category of labour force status, population aged 16 to 65, Canada and jurisdictions, 2003



Jurisdictions are ranked by the proportions who are employed.

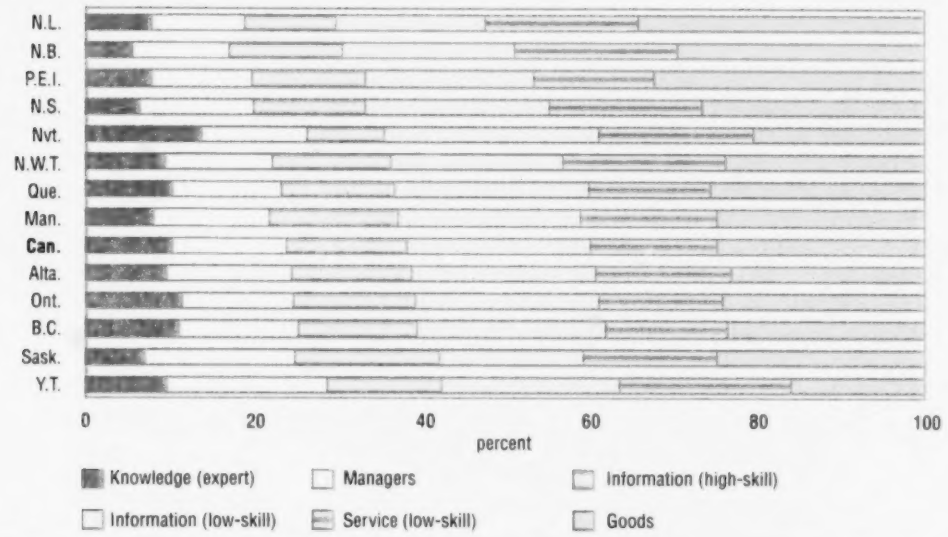
Source: Adult Literacy and Life Skills Survey, 2003.

As can be seen in Chart 1.6, the provinces and territories have very different occupational structures. Overall, Atlantic Canada has a comparatively low share of its workforce in knowledge intensive sectors (knowledge experts, managers and high-skill information) but a high proportion in goods-related or manufacturing occupations. Nunavut (14 percent) has a surprisingly high fraction of knowledge experts but a smaller than average high-skill information sector, 9 percent as compared to a national average of 14 percent. The Yukon has less than 16 percent in the goods manufacturing sector as compared to 25 percent in other provinces and territories. However, the Yukon has the highest proportion of managers (19 percent) while others stay close to the average. Fourteen percent of employed Canadians work in the high-skill information sector, except in Nunavut where the sector only accounts for nine percent of the labour force. The low-skill information sector makes up the second largest segment of occupations, varying from 17 to 25 percent across the provinces and territories. The remaining 15 percent of occupational composition is found in the low-skill service sector. New Brunswick, the Northwest Territories and the Yukon have about 20 percent of their labour participants in low-skill services.

Chart 1.6

Distribution of occupational types in Canada

Percent of adults in each type of occupation, employed population aged 16 to 65, Canada and jurisdictions, 2003



Jurisdictions are ranked by the proportions who are in knowledge (expert), manager and information (high-skill) jobs.

Source: Adult Literacy and Life Skills Survey, 2003.

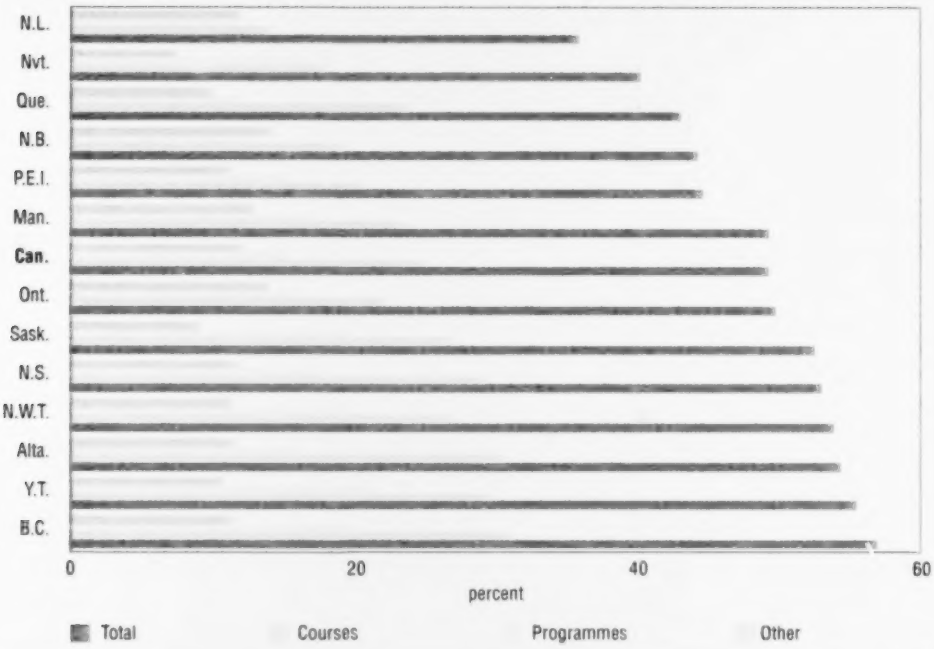
The ALL data confirm that the rate of participation in adult education and training continues to vary across Canada, see Chart 1.7. British Columbia reports the highest participation among the provinces (57 percent) with Alberta, Saskatchewan and Nova Scotia following closely behind. Participation is particularly low in Newfoundland and Labrador where only 36 percent were enrolled in 2003. Other provinces with a comparatively low engagement in organized forms of adult learning are Quebec, New Brunswick and Prince Edward Island. Two of the territories, the Yukon and the Northwest Territories have participation rates similar to British Columbia and Alberta while the rate in Nunavut is comparatively low.

Chart 1.7 confirms that the regional variations in courses and programmes naturally mirror the discrepancies found in total participation. Involvement in programmes is high in the Yukon, Saskatchewan, the Northwest Territories and British Columbia; and low in Newfoundland and Labrador, Quebec and New Brunswick. In view of Nunavut's low total participation it is noteworthy that 17 percent of its adult population participate in programmes, which is just above the Canadian average. Participation in courses is high in British Columbia, Alberta, Nova Scotia, the Yukon and the Northwest Territories and low in Newfoundland and Labrador, and Nunavut. Participation in what has been labelled "other" activities is in relation to the overall participation rate particularly high in Newfoundland and Labrador, and New Brunswick.

Chart 1.7

Participation rates in organized forms of adult learning in Canada

Percent of population aged 16 to 65 participating in courses, programmes and other forms of adult education and training during the year preceding the interview, Canada and jurisdictions, 2003



Jurisdictions are ranked by the total adult education and training participation rate.

Source: Adult Literacy and Life Skills Survey, 2003.

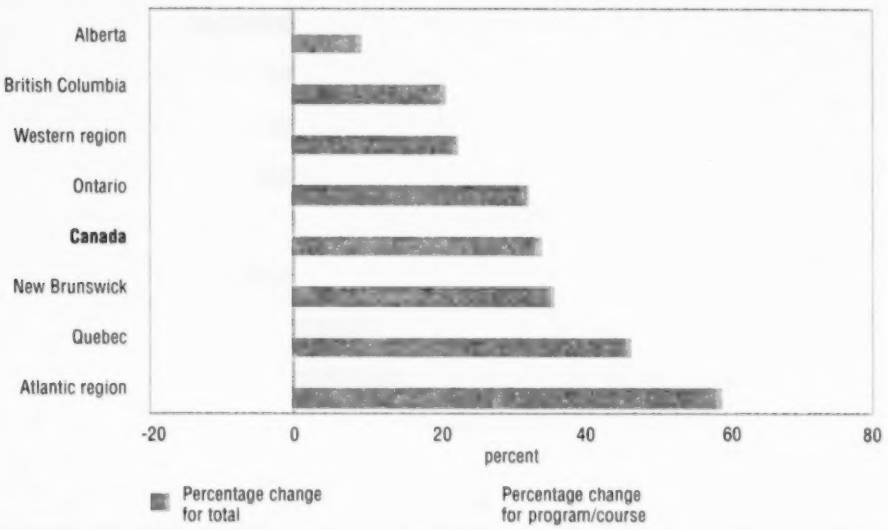
A comparison of the 1994 IALS and the 2003 ALL participation rates reveals that while the regional differences remain high there have been positive developments. The Atlantic region, including Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and New Brunswick, with the lowest participation rate in 1994, has seen a staggering 60 percent growth over the period while Alberta, with the highest rate in 1994, only increased by nine percent.

It should be noted that participation in what has been labelled "other" activities is in relation to the total participation rate particularly high in Newfoundland and Labrador, and New Brunswick. This suggests that in these two provinces a relatively larger share of their gains in the total participation rate is coming from involvement in activities of a very short nature.

Chart 1.8

Changes in participation between the IALS and ALL survey periods

Changes in the percent of adults aged 16 to 65 in adult education and training programmes and/or courses and the total participation rate between IALS 1994 and ALL 2003, Canada and jurisdictions



Jurisdictions are ranked by changes in the total participation rate.

Notes: No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus the three territories are excluded from the Canadian average.

The Western region includes Manitoba, Saskatchewan, Alberta and British Columbia. The Atlantic region includes Newfoundland and Labrador, Nova Scotia, New Brunswick and Prince Edward Island.

In ALL, it is possible to derive three categories of adult education and training, namely programmes, courses and a residual category called "other". In IALS there was no possibility for a residual category – all responses were either programmes and/or courses. This is due to a technical design change from IALS to ALL in the adult education module. In this chart, the residual category other is excluded from the 2003 estimates. The implications of this technical change on the comparability of the estimates from 1994 to 1998 to 2003 are not clear. Are the responses to "other" in 2003 picking up something that was not being picked up in 1994 to 1998 (i.e., less formalized modes of adult learning) or were these responses forced into programmes and/or courses in 1994? Given this limitation, caution is advised when comparing the estimates between the two surveys.

Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

1.2. Duration of participation in adult education and training

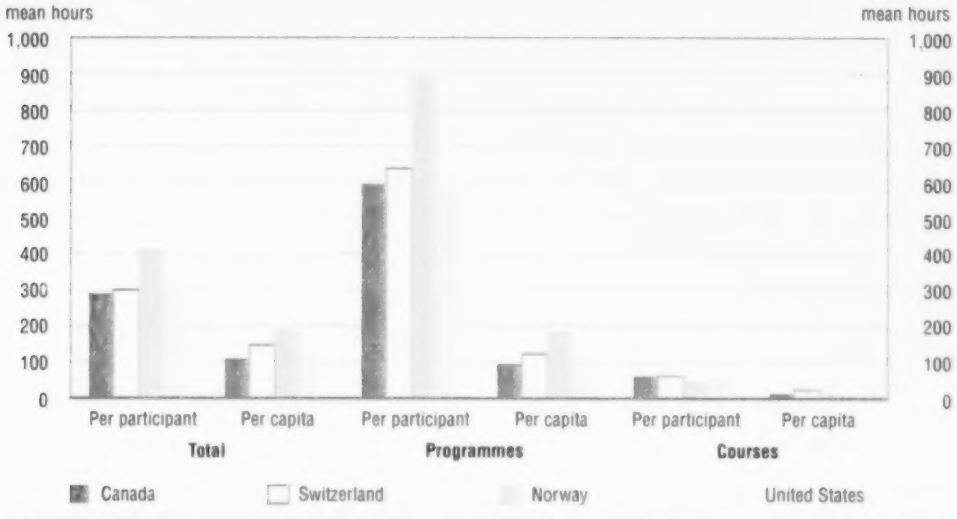
International comparisons

The participation rate in adult education and training is a crude measure of the training/learning effort, as the impact of education is largely determined by the duration of the participation (Houtkoop and Oosterbeck, 1997). Chart 1.9 reports the average number of hours spent on adult education in programmes and courses in Canada and selected countries.

Chart 1.9

Annual mean hours of study per participant and per capita

Annual mean hours of study per participant and per capita, by various organized forms of adult learning, population aged 16 to 65, Canada and selected countries, 2003



Source: Adult Literacy and Life Skills Survey, 2003.

The findings confirm that not only do Canadians report a somewhat lower participation rate than citizens in the three other countries but they also spend less time on their studies. Further analyses are needed to understand why this might be the case. The mean hour per participant in Canada is 291 hours as compared to 413 hours among Norwegians. Expressed differently, the mean hour per capita varies from a low of 108 hours in Canada to a high of 190 hours in Norway. The per capita figure for the United States is around 20 hours higher than for Canada. The difference between countries can be primarily explained by variations in the length of programmes since average course durations are more or less similar.

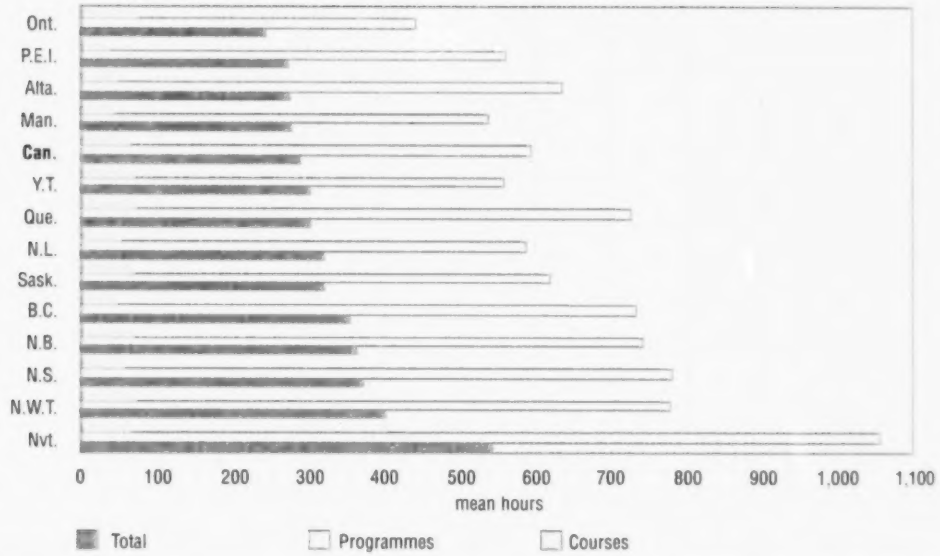
Provincial and territorial comparisons

According to the findings presented in Chart 1.10 annual hours invested in courses and programmes is comparatively low in all provinces and territories. The Canadian mean hours spent in programmes is 595 and for courses 64 hours. Nunavut, with a mean duration of 1,057 hours for programmes, is exceptionally high. Otherwise the mean duration for programmes varies from a low of 444 hours in Ontario to a high of 781 in Northwest Territories and Nova Scotia. Regions with relatively lengthy programmes are Quebec, Newfoundland and Labrador, and British Columbia, while the Yukon, Manitoba, Ontario and Prince Edward Island fall below the national average. The length of courses varies less and spans from a low of 36 hours in Prince Edward Island to a high of 74 hours in Ontario and the Northwest Territories.

Chart 1.10

Annual mean hours of study per participant in Canada

Annual mean hours of study per participant, by various organized forms of adult learning, population aged 16 to 65, Canada and jurisdictions, 2003



Jurisdictions are ranked by the total annual mean hours of study in adult education and training.

Source: Adult Literacy and Life Skills Survey, 2003.

1.3. Direct financial support for adult education and training

It should be noted that ALL only addresses direct financial support going to the individual student. However, in Canada and most countries government funding for education is overwhelmingly directed toward educational institutions rather than the individual. A survey of Canada Year Books shows that publicly funded educational expenditures have increased by four percentage points, from 11.9 percent in 1990/1 to 15 percent of government total expenditures in 2001/2002, totalling $58.1 billion (Statistics Canada, 2001b).

International comparisons

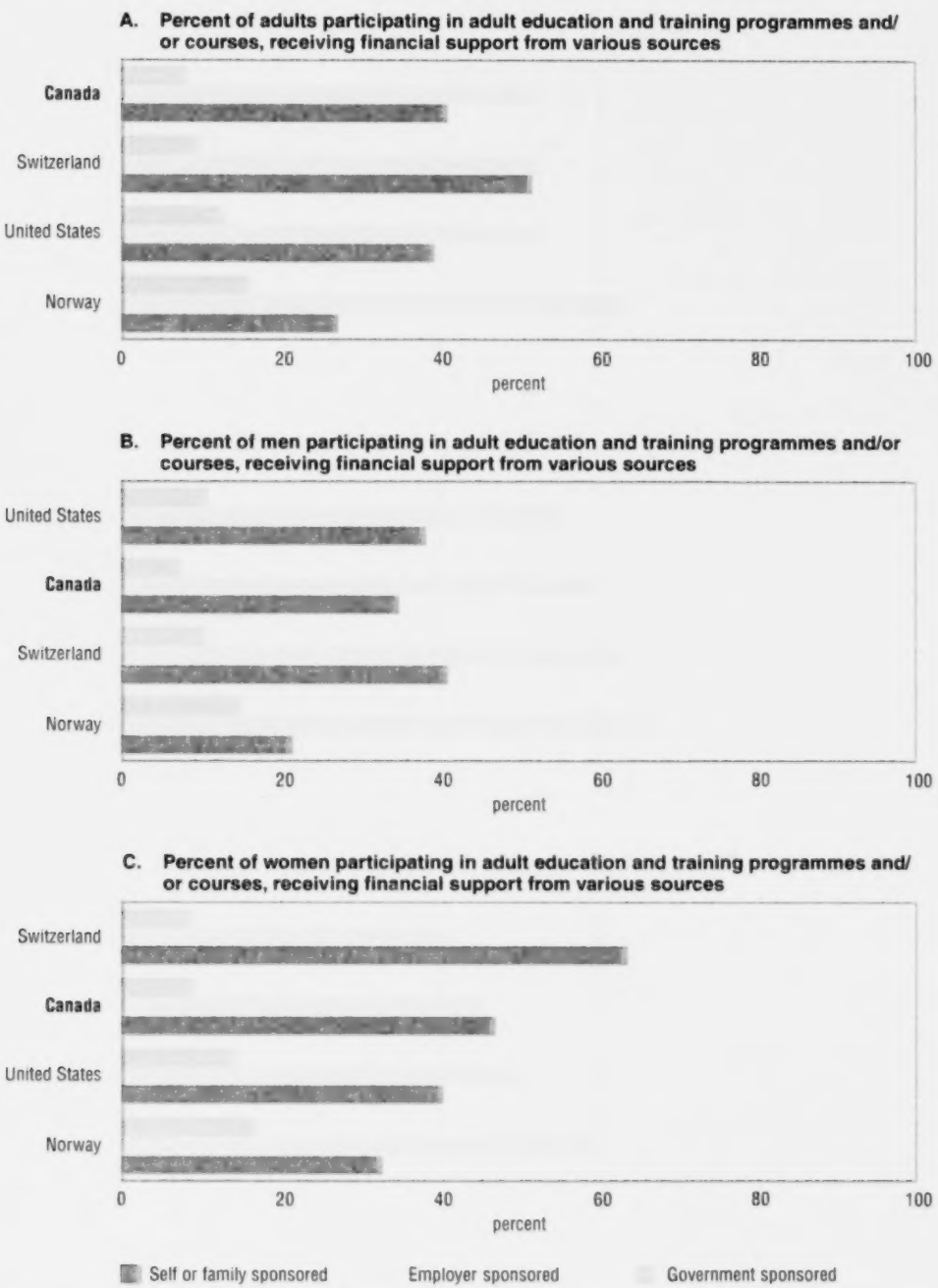
Chart 1.11 reports the sources of direct financial support for participating in adult education and training. Three findings stand out. First, the central role employers play for sponsoring participation in adult education and training. This is particularly the case in Norway where 63 percent of the participants report receiving financial support from their employer. In Canada, Switzerland and the United States, the figure is somewhat lower (around 50 percent). In the latter three countries, self financing is reported at about the same extent (40 to 50 percent) as employer financing while this form of financing is less frequent in Norway (27 percent).

Second, there are very pronounced gender differences in all four countries. Men have access to employer financing to a much larger extent than women. In Canada, 60 percent of men report getting financial support from employers compared to only 45 percent of women. The difference is even more pronounced in Switzerland where 62 percent of men get financial support from employers compared to 42 percent among women. The smallest gender imbalances are found in the United States where men only slightly more often report employer financing. The gender difference cannot be explained by differences in labour force status, type of occupation, age, level of education, level of document literacy skills, or immigrant status (see adjusted logistic regression results reported in Table B1.5 in Annex B).

Chart 1.11

Sources of financial support for adult learning by gender

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, by gender, Canada and selected countries, 2003



Countries are ranked by the proportions receiving employer support.

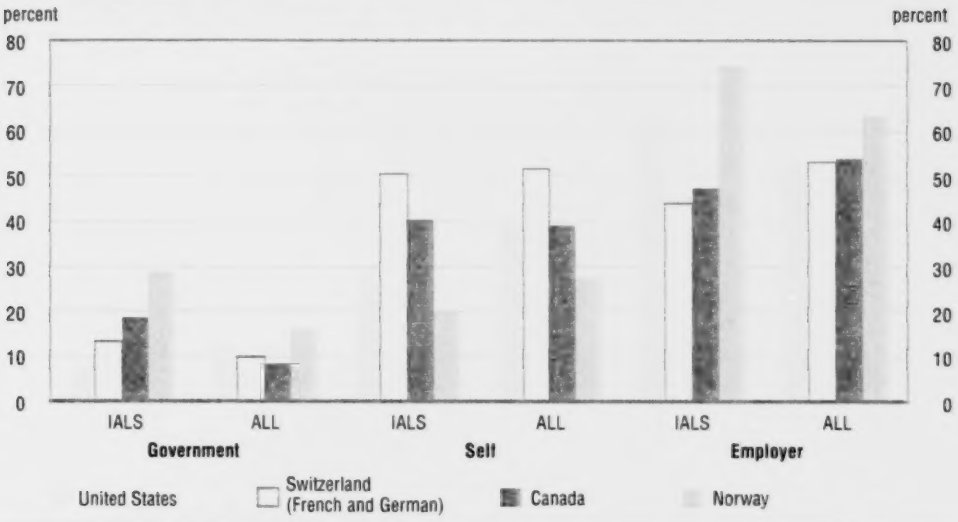
Source: Adult Literacy and Life Skills Survey, 2003.

Third, it is relatively rare that participants receive direct financial support from government sources. It is most frequent among Norwegians, at 16 percent, while only 8 percent of Canadians get direct financial support from government sources. Chart 1.12 compares the change in financial support between the IALS and ALL survey periods. It can be seen from the data that there is a decline in direct financial support from government sources in Canada (from 20 to 8 percent), Norway (from 33 to 16 percent) and Switzerland (from 16 to 10 percent). Only in the United States is there an increase (from 9 to 13 percent).

Chart 1.12

Comparison of sources of financial support between the IALS and ALL survey

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and selected countries, IALS 1994 and ALL 2003



Countries are ranked by the reduction in direct government financial support between IALS and ALL.

Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS in 1994, while Norway and the Italian speaking community of Switzerland participated in IALS in 1998. The latter is excluded from this analysis due to small sample sizes.

To allow for comparisons between participation rates in IALS and ALL, the calculations for this analysis exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

The structure of the adult education modules in IALS and ALL differ slightly. In IALS, each respondent could report up to three mentions of participation, either programme or course, and correspondingly could report whether in each instance, the respondent received either government support, employer suppport, other support or financed themeselves. But in ALL, respondents could report up to three mentions of participation in courses only, and further could only report whether they had received financial support in only the most intensive course. Therefore, to allow for a fair comparison between IALS and ALL, only the first mention (equalling the most intensive course in ALL) is used to determine whether an individual received direct financial support from a particular source.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

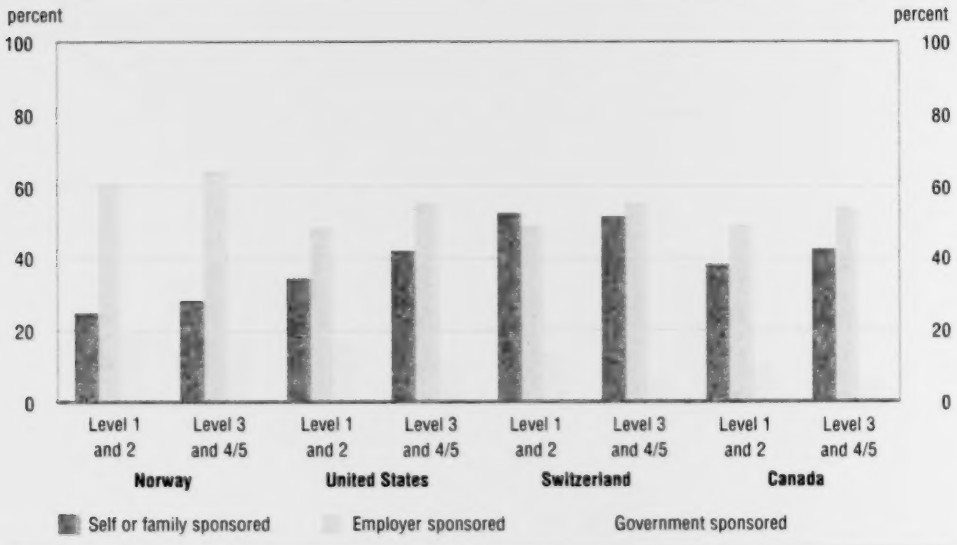
From an equity and public policy perspective it is of interest to consider how various sources of financial support are reaching vulnerable groups like those with low literacy capacity. Chart 1.13 presents sources of financial support by literacy levels. In all four countries those with limited literacy skills (Levels 1 and 2) benefit from government support to a higher degree than those with higher levels of literacy skills (Levels 3 and 4/5). This can be explained by direct government support for literacy and labour market training programmes. However, there are distinct country differences in the extent to which those with low literacy are being supported financially by government. Close to one in five Norwegians with low literacy skills get support from the government as compared to just over one in ten in Canada. Government support in Canada for those with low literacy skills is less frequent than in the United States.

The extent of employer support between adults with low (Level 1 and 2) and medium to high (Levels 3 and 4/5) literacy skills varies less than could be expected. The gap is somewhat higher in Canada and the United States, but even here the difference in rates is less than 10 percent. Looking at actual rates, it is noteworthy that in Switzerland and Norway slightly over 50 percent of the participants with low literacy (Levels 1 and 2) receive financial support from their employer.

Chart 1.13

Sources of financial support for adult learning by literacy

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, by low literacy (Levels 1 and 2) and medium to high literacy (Levels 3 and 4/5), document literacy scale, Canada and selected countries, 2003



Countries are ranked by the proportions at literacy Levels 1 and 2 who received government support.

Source: Adult Literacy and Life Skills Survey, 2003.

Another group of interest are recent immigrants. Adult education and training is one way to assist them settling in their new homeland. In Norway, close to 50 percent of recent immigrants that participate in adult education and training receive financial support from the government while in Canada it is only 15 percent (See Table B1.2 in Annex B). The immigration status and adult learning relationship is discussed further in Section 2.1.6.

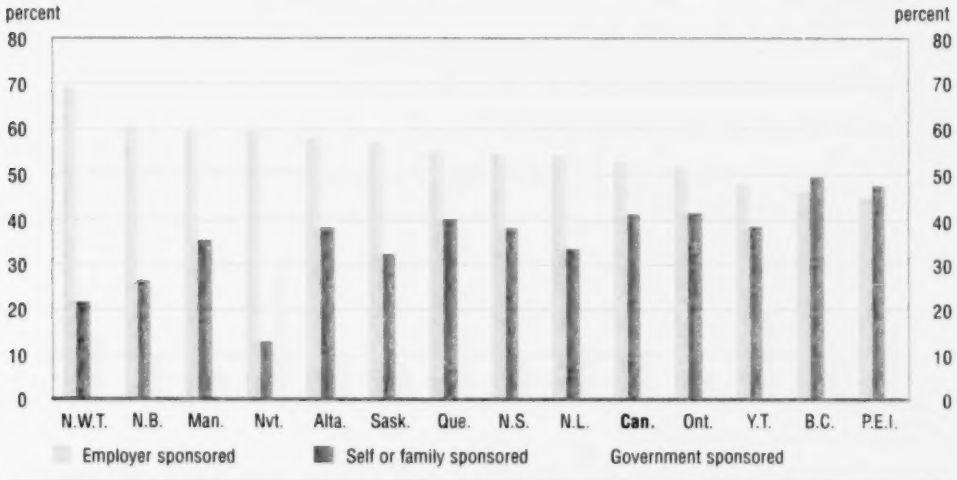
Provincial and territorial comparisons

The findings presented in Chart 1.14 reveal substantial regional differences in sources of financing. Employer financing is comparatively low in Prince Edward Island (45 percent), British Columbia (46 percent) and the Yukon (48 percent) but high in the Northwest Territories (69 percent), New Brunswick (60 percent) and Manitoba (60 percent). Self financing is mentioned relatively more often by British Columbians (49 percent) and those living in Prince Edward Island (47 percent) while the opposite is true for those in the Northwest Territories (22 percent) and New Brunswick (26 percent). Direct financial support from government varies from a low of 6 percent in Ontario to a high of 28 percent in Nunavut. This form of financing is comparatively frequent (15-28 percent) in all three territories while it remains in the range of 6-10 percent in the provinces.

Chart 1.14

Sources of financial support for adult learning in Canada

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and jurisdictions, 2003



Jurisdictions are ranked by the proportions receiving employer support.

Note: Estimates for government-financed participation in Prince Edward Island and self-financed participation rate in Nunavut are unreliable due to small sample sizes (i.e., less than 30). Use with caution.

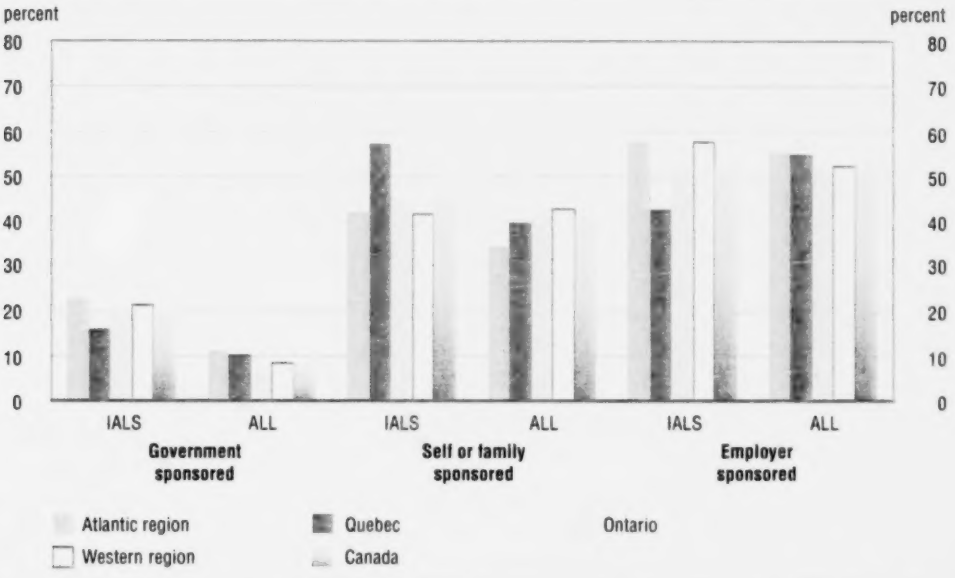
Source: Adult Literacy and Life Skills Survey, 2003.

The small sample sizes in IALS make it impossible to study changes in direct financial support for all ten provinces. In order to generate statistically reliable estimates the provinces have been grouped into four regions: Atlantic region, Quebec, Ontario and Western region. Chart 1.15 points to very different developments in these four regions. First, there appears to be a sharp reduction of direct government financial support across Canada, most dramatically in Ontario where the rate dropped from 21 to six percent. The drop was also significant in the Western and Atlantic regions. The proportion of Ontario participants that receive support from employers and/or self-financing remains almost unchanged. However, Quebecois report a drastic shift away from self-financing to employer support. The former dropped from 57 percent in IALS to 40 percent in ALL while the latter went from 43 to 55 percent. This shift likely reflects the Quebec government's introduction of provincial tax policy in 1998, which increased employer incentives for worker training and education (OECD 2002).[1] However, in the Atlantic region, the noticeable drop in self-financing, from 42 to 34 percent, was not compensated for by a matching increase in employer-financing as was the case in Quebec. Further, in the Western region, a marginal increase in self-financing fell short of offsetting a larger drop in employer-financing.

Chart 1.15

Comparison of sources of financial support between the IALS and ALL survey

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and jurisdictions, IALS 1994 and ALL 2003



Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

From a public policy perspective, it is interesting to consider the extent to which government support reaches vulnerable groups such as the unemployed or those outside the labour market. According to IALS data in 1994, 38 percent of the unemployed participating in courses and/or programmes received direct financial support from government. In 2003 the figure had dropped slightly to 33 percent. However, during the same period those outside the labour force saw a very dramatic decrease in government support which shrunk from 42 percent to 20 percent (see Table B1.3 in Annex B). The results reflect changes made to eligibility for unemployment insurance (see e.g. McKeen and Porter, 2003).

1.4. Patterns of informal learning

According to the underlying philosophy of lifelong learning, participation is not limited to organized forms of adult learning but also includes informal learning. The latter result from daily life activities related to work, family or leisure. Informal learning is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is "incidental"/random (EC, 2000; 2001). Informal learning, experience and practice are closely related concepts. Without careful distinction, most life experiences can be viewed as involving informal learning, but clearly, certain types of activities are more relevant than others when it comes to the formation of relevant competencies. Although still contested in the literature, a strong hypothesis is that merely learning in the course of daily life without some systematic prior reinforcement, such as formal education, may not be sufficient for developing competencies that have economic and social value (Svensson, Ellström and Åberg, 2004).

Interestingly, studies have shown differing patterns of engagement in adult education and training compared to intentional forms of informal learning (e.g., Livingstone, 1999a; Statistics Canada, 2001a). However, it is worth noting that while policy documents overwhelmingly subscribe to distinctions between formal, non-formal and informal learning (see Introduction), the scholarly literature contains many different and competing definitions and questions the advisability of trying to seek clear definitional distinctions between the three concepts (Colley, Hodkinson & Malcolm, 2002).

Recognizing that lifelong learning includes the entire spectrum of formal, non-formal and informal learning, ALL attempts to estimate the extent to which adults engage not only in organized forms of learning activities but also in informal activities. As used in ALL, the term is explicit in its reference to learning and it reflects a degree of intentionality in acquiring and developing competencies.

The ALL indicators on informal learning vary in nature and scope. Some are very specific and focus on informal learning through engagement in various specific contexts, primarily but not exclusively related to work (indicators 1 to 4), or in conjunction with cultural activities (indicator 5). Two other items ask about learning through the interactive use of information technologies (indicators 6 and 7) and, lastly, there are two broad general items that more or less cover everything through inquiring about learning by watching or doing (indicators 8 and 9).

ALL indicators of informal learning

1. Visit fairs, conferences or congresses
2. Read manuals, reference or other materials
3. Learn by being sent around an organization
4. Attend lectures, seminars or special talks
5. Go on guided tours (museums, galleries, etc.)
6. Use computers or the Internet to learn
7. Use video, television, tapes to learn
8. Learn by watching, getting help from others
9. Learn by yourself, trying different ways

International comparisons

The results (see Chart 1.16) confirm previous findings (Livingstone, 1999a) that informal learning is more or less a universal activity. Of the nine instances of informal learning activities identified in ALL, two dominate. Learning by doing is being mentioned by around 90 percent in each of the countries while learning by watching ranges from a high of 87 percent in Switzerland to a low of 77 percent in Canada.

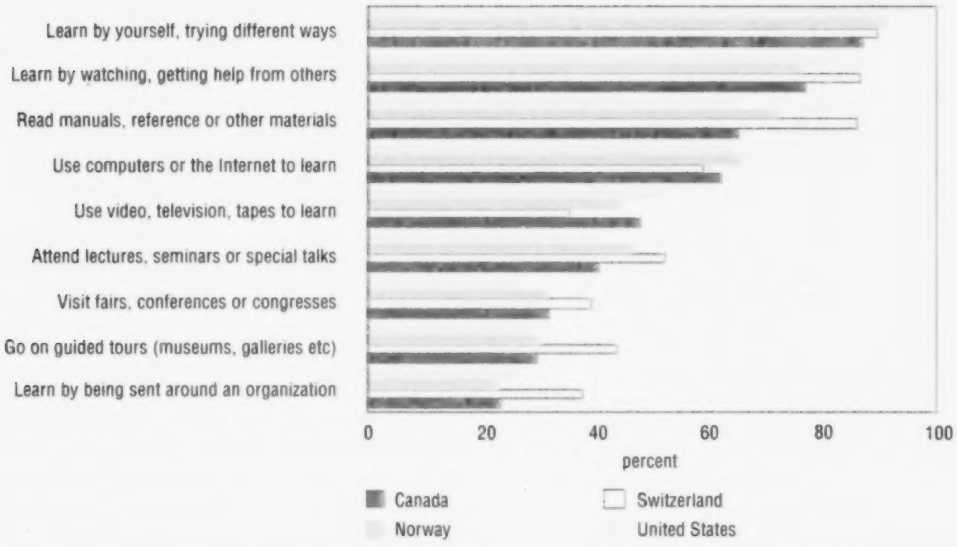
Chart 1.16 shows that engagement in specific contexts related to work and culture are particularly prevalent in Switzerland and less common in Canada and the United States with Norway somewhere in between. Thus, a vast majority of the Swiss (86 percent) report that they read manuals or other materials. The figure for Canada and the United States is 21 percent lower. The Swiss more often note that they learn by being sent around their organization or attend special talks. Further, they more frequently (44 percent) go on guided tours at museums or galleries than Canadians, Americans or Norwegians (30 percent).

The questions around the interactive use of information technology reveal that there are only small differences in the use of computers or internet, while learning with the help of video, television and tapes vary from a high of 52 percent in the United States to a low of 35 percent in Switzerland.

Chart 1.16

Engagement in various informal learning activities

Percent of population aged 16 to 65 who engaged in various informal learning activities during the year preceding the interview, Canada and selected countries, 2003



Source: Adult Literacy and Life Skills Survey, 2003.

Provincial and territorial comparisons

As almost all Canadians (93 percent) report having been involved in some form of informal learning in the year preceding the interview, there are only small variations across the country. The rate varies from a low of 88 percent in Newfoundland and Labrador to a high of 98 percent in the Yukon. The regional pattern of engagement in informal learning follows the distribution of participation in organized forms of adult learning. In general, jurisdictions which report above average participation in the latter, such as Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon, also have above average participation in informal learning. Table 1.1 provides a closer analysis of the nine informal learning activities covered by ALL.

Table 1.1

Engagement in various informal learning activities in Canada

Percent of population aged 16 to 65 who engaged in various informal learning activities during the year preceding the interview, Canada and jurisdictions, 2003

	Nvt.	N.L.	N.B.	Que.	P.E.I.	N.S.	Ont.	N.W.T.	Alta.	Man.	B.C.	Sask.	Y.T.	**Canada**
								percent						
Attend lectures, seminars or special talks	30[1]	33[1]	34[1]	34[1]	40[1]	40[1]	42	43	44	45	48	51	52	**41**
Read manuals, reference or other materials	52[1]	51[1]	64[1]	64[1]	66	64[1]	63[1]	69	70	66	71	77	75	**65**
Visit fairs, conferences or congresses	22[1]	20[1]	25[1]	32	35	26[1]	31[1]	37	39	30[1]	32	47	43	**32**
Learn by being sent around an organization	26	22[1]	24	15[1]	26	23[1]	23[1]	33	34	30	31	25	30	**24**
Go on guided tours (museums, galleries etc.)	20[1]	21[1]	22[1]	27[1]	21[1]	29[1]	31	26[1]	32	28[1]	33	35	36	**30**
Use computers or the Internet to learn	42[1]	52[1]	54[1]	52[1]	58[1]	62	65	65	70	62	70	71	75	**62**
Use video, television, tapes to learn	43[1]	38[1]	45[1]	41[1]	47[1]	48	48	52	52	51	57	56	59	**48**
Learn by watching, getting help from others	91	72	74[1]	71[1]	80	77	78	86	83	82	81	86	87	**77**
Learn by yourself, trying different ways	95	85[1]	85[1]	84[1]	88	87	87	91	91	92	91	93	96	**87**

Jurisdictions are ranked by the percent of adults who report attending lectures, seminars or special talks.

1. Jurisdictions that report engagement in certain informal learning activities that is below the National average.

Source: Adult Literacy and Life Skills Survey, 2003.

Four findings stand out in Table 1.1. First, adults in Saskatchewan and the Yukon and to some extent Alberta are more actively pursuing informal learning through engaging in various work and cultural contexts such as attending meetings, lectures, seminars, going on guided tours, engaging in reading activities through the use of manuals and other reference materials, and the interactive use of learning technologies like computers or video. Second, Newfoundland and Labrador, and Nunavut report a comparatively low frequency of engagement in these activities. Third, it should be noted that these regions also reported comparatively low rates of participation in organized forms of adult learning. Fourth, it is interesting to note that the citizens of Nunavut, who less often engage in the specified activities or use interactive learning tools, report the highest instance of learning by watching others and are well above the Canadian average in learning by doing. This is not the situation in Newfoundland and Labrador which also falls below the Canadian average for these activities. Whether restricted possibilities for informal learning through a low engagement in various work and cultural contexts can be partly compensated by learning through doing and/or watching is an open question.

Chapter one has presented international and territorial comparative estimates of participation in adult learning while the following chapter will focus on the level of inequality in adult learning in Canada and the selected countries.

Chapter 2
Adult learning: who is being left out?

In a *knowledge based economy* and *society* where economic opportunities and civic participation are increasingly linked to citizens' ability to command and control their own life, the distribution of adult learning across populations becomes a key policy issue. This chapter focuses on inequalities in participation in organized forms of adult learning as well as informal learning. The analysis is organized by various demographic characteristics known to be associated with adults' readiness to engage in learning. The chapter compares the level of inequality in Canada and selected countries as well as within Canada. By comparing the findings from IALS and ALL, the chapter attempts to look at changes in the degree of inclusiveness between the two survey periods.

2.1. Inequalities in organized forms of adult learning

2.1.1. Adult literacy and participation

With reference to Amartya Sen's concept of basic capability equality (Sen, 1982), adult literacy can be seen as an ability that is critical for citizens to function in a learning society. Thus, it is particularly important to assess the extent of participation in adult activities that can help improve their capacity as well as preventing further deterioration.

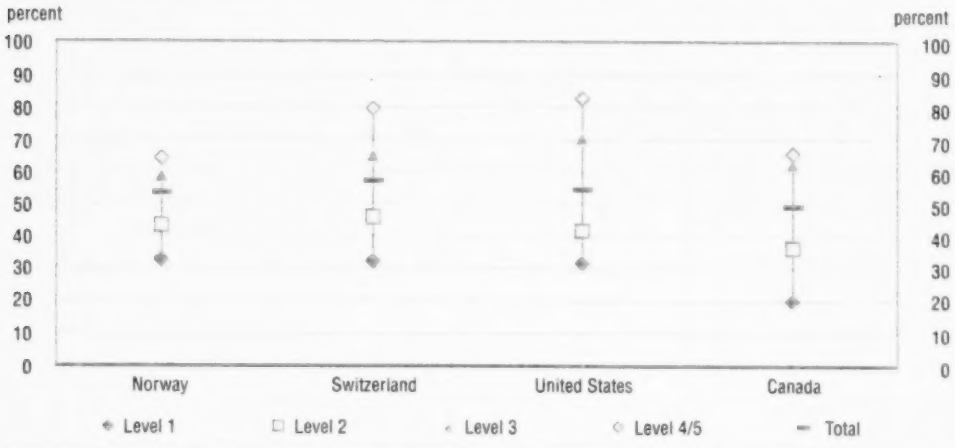
International comparisons

Chart 2.1 presents total participation rates in adult education and training by document literacy skills in Canada and selected countries. Three findings stand out. First, in all countries there is a substantial difference in participation rates between those with the lowest and highest levels of literacy. Second, there is a sharp divide between those at Levels 2 or below and those at Levels 3 or higher. Thus, those most in need to enhance their basic capabilities in order to be able to compete in a labour market are the most excluded from the learning society. Third, those performing at the lower level of the literacy continuum are doing particularly poorly in Canada. Chart 2.1 also suggests that the level of inequality varies between the four countries.

Chart 2.1

Participation rates in organized forms of adult learning by literacy

Percent of population aged 16 to 65 participating in adult education and training during the year preceding the interview, by document literacy levels, Canada and selected countries, 2003



Countries are ranked by the proportions in Level 1.

Source: Adult Literacy and Life Skills Survey, 2003.

To obtain comparable estimates of inequalities, even though the actual participation rates vary between countries, logistic regression analysis is used to focus on the level of inequality in each of the four countries. Inequalities are expressed by the difference in the likelihood of participating compared to adults with low literacy (Level 1) on the document literacy scale – these are referred to as *odds ratios* (see Box 3). The results presented in Chart 2.2 point to sharp differences in the level of inequality between countries. Highly literate Americans (Level 4/5) are close to 14 times more likely to participate than those with the lowest literacy (Level 1). In Switzerland and Norway, the same discrepancy is only five times, and in Canada 7.5 times.

Box 3
Using odds ratios

Odds ratios reflect the relative likelihood of an event occurring for a particular group compared to a reference group. An odds ratio of one represents equal chances of an event occurring for a particular group vis-à-vis the reference group. Coefficients with a value below one indicate less chance of the event occurring for a particular group compared to the reference group, and coefficients greater than one represent increased chances (Hosmer and Lemeshow, 1989).

For the purpose of the analyses presented in Chart 2.2, the likelihood or odds of adults scoring at Level 1 was set to one. Odds greater than one for adults scoring at higher levels indicate that those persons have an increased chance of having participated in adult education and training during the year preceding the interview.

Low inequality in Norway corresponds with a long tradition of adult education, including popular adult education, as well as recent reforms that continue to aim efforts toward increasing participation among low skilled adults who are hard to reach (OECD, 2001). In Switzerland the level of inequality might be linked to a recent expansion in private sector training.

Chart 2.2

Likelihood of participating in organized forms of adult learning by literacy

Unadjusted odds ratios showing the likelihood of adults aged 16 to 65 receiving adult education and training, by document literacy levels, Canada and selected countries, 2003

Countries are ranked by the odds ratios of those in Level 4/5.

Source: Adult Literacy and Life Skills Survey, 2003.

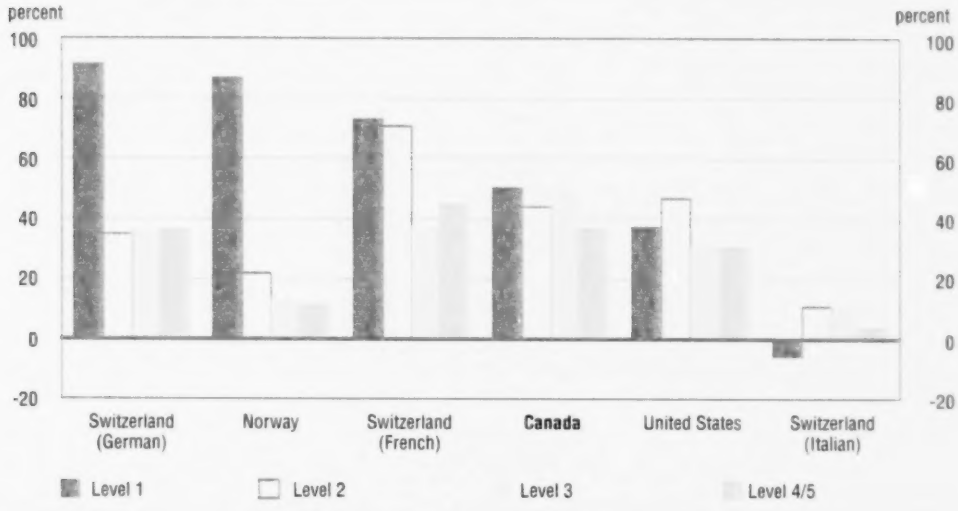
> Contrary to the goal of reaching the vulnerable groups, findings reveal that those with the weakest basic capabilities, as identified by their literacy scores, are the least likely to benefit from the increased opportunities to participate in organised forms of adult learning. Thus adult education and training, including government financed training, will tend to amplify rather than attenuate social inequalities in labour market outcomes.

While recognizing the existence of substantial inequalities in participation in 2003 it is important to note that in some countries the most vulnerable have benefited substantially from recent increase in enrolment in organized forms of adult learning, see Chart 2.3. In Norway the participation rate among those with the lowest level of literacy increased by as much as 87 percent between 1998 and 2003. In Switzerland (German and French speaking communities) and the United States, participation rates have increased more among those with the lowest level of literacy than any other levels. These results suggest that recent efforts to extend lifelong learning opportunities to those with limited literacy skills (see e.g. OECD, 2005) have been met with some success. In Canada, increases in participation rates were comparatively similar among different literacy levels, ranging from 50 percent (Level 1) to 37 percent (Level 4/5).

Chart 2.3

Changes in participation between the IALS and ALL survey periods by literacy

Changes in the percent of adults aged 16 to 65 in adult education and training between IALS 1994 to 1998 and ALL 2003, Canada and selected countries



Countries are ranked by changes in the participation rate for those in Level 1.

Notes: Changes in participation rates are calculated by taking the difference between the ALL and the IALS rates and dividing by the average participation rates of the two periods, i.e., (ALL rate - IALS rate)/((ALL rate + IALS rate)/2).

Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS 1994, while Norway and the Italian speaking community of Switzerland participated in IALS 1998.

To allow for comparisons between participation rates in IALS and ALL, the calculations exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

Provincial and territorial comparisons

Table 2.1 compares the difference in participation in adult education and training between those with low (Level 1 and 2) and medium to high (Level 3 and 4/5) literacy on the document literacy scale. The difference is expressed in terms of odds ratios. With few exceptions the difference in total participation does not vary much between provinces and territories. The discrepancy is particularly high in Manitoba and the Northwest Territories and low in the Yukon. It is noteworthy that the level of participation in programmes is almost identical for those in the Yukon with low (Level 1 and 2) and medium to high (Level 3 and 4/5) literacy. The differences in course participation are low across the country.

Table 2.1

Likelihood of participating and participation rates in organized forms of adult learning by literacy

Percent, and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 receiving adult education and training, by document literacy levels, Canada and jurisdictions, 2003

	Total participation rate		Unadjusted odds ratios							
			Total		Programmes		Courses		Other	
	Low literacy (Levels 1 and 2)	Medium to high literacy (Levels 3 and 4/5)	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy
	percent		ratio		ratio		ratio		ratio	
N.L.	23	50	1.0	3.1*	1.0	2.8*	1.0	2.1*	1.0	2.6*
P.E.I.	33	55	1.0	2.2*	1.0	1.5	1.0	1.6	1.0	2.1**
N.S.	36	65	1.0	3.3*	1.0	2.2*	1.0	2.9*	1.0	1.4
N.B.	33	58	1.0	3.1*	1.0	2.1*	1.0	2.9*	1.0	1.8*
Que.	33	55	1.0	2.4*	1.0	1.7*	1.0	2.3*	1.0	1.5*
Ont.	36	60	1.0	2.9*	1.0	2.0*	1.0	2.9*	1.0	1.3**
Man.	31	62	1.0	3.5*	1.0	2.1*	1.0	3.1*	1.0	1.7*
Sask.	35	61	1.0	3.5*	1.0	1.6*	1.0	4.3*	1.0	1.4
Alta.	39	64	1.0	2.8*	1.0	1.6*	1.0	2.4*	1.0	1.8*
B.C.	39	67	1.0	2.8*	1.0	2.0*	1.0	2.7*	1.0	1.1
Y.T.	44	61	1.0	2.2*	1.0	1.2	1.0	3.3*	1.0	1.2
N.W.T.	37	68	1.0	3.6*	1.0	2.5*	1.0	3.4*	1.0	0.9
Nvt.	32	60	1.0	2.7*	1.0	2.3*	1.0	2.5*	1.0	1.0
Can.	**35**	**60**	**1.0**	**2.9***	**1.0**	**2.0***	**1.0**	**2.8***	**1.0**	**1.5***

* p<.01, statistically significant at the level 1 percent level.

** p<.05, statistically significant at the level 5 percent level.

Source: Adult Literacy and Life Skills Survey, 2003.

2.1.2. Education and participation

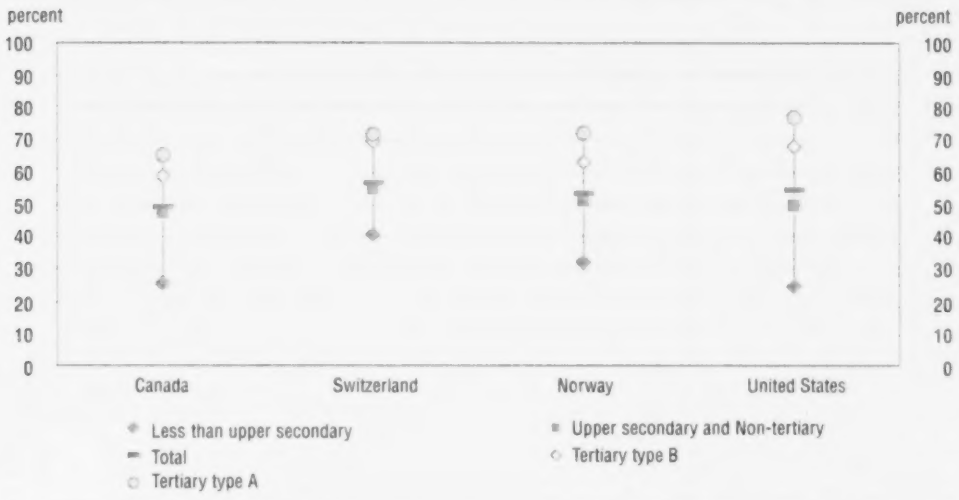
International comparisons

As noted already in Johnstone and Rivera's (1965) seminal study and confirmed in study after study, educational attainment is by far the best predictor of participation in adult education. The well known fact that the more education a person has, the more likely he or she is to participate in adult education or training is yet again demonstrated by the findings presented in Chart 2.4.

Chart 2.4

Participation rates in organized forms of adult learning by education

Percent of population aged 16 to 65 participating in adult education and training during the year preceding the interview, by level of education, Canada and selected countries, 2003



Countries are ranked by the proportions who completed less than upper secondary.

Source: Adult Literacy and Life Skills Survey, 2003.

Although the trend is the same in all countries, it is worth noting the comparatively high participation (40 percent) among the Swiss who have attained less than an upper secondary education. The participation rate for Americans and Canadians with the same educational attainment was noticeably lower, at around 25 percent. The inequalities between groups who have attained different levels of education are particularly pronounced in the United States.

Provincial and territorial comparisons

Table 2.2 presents the total participation rates by education for the provinces and territories. The differences in likelihood to participate between someone with less than an upper secondary education and a person with a university education are reported in the form of adjusted and unadjusted odds ratios.

Table 2.2

Likelihood of participating in organized forms of adult learning by education

Adjusted and unadjusted odds ratios showing the likelihood of adults aged 16 to 65 participating in adult education and training, by level of education, Canada and jurisdictions, 2003

	Less than upper secondary		Upper secondary and non-tertiary		Tertiary type B		Tertiary type A	
	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds
	ratio		ratio		ratio		ratio	
Newfoundland and Labrador	1.0	1.0	3.9*	2.9*	6.6*	4.2*	10.3*	5.3*
Prince Edward Island	1.0	1.0	2.3*	1.7**	2.8*	2.0	6.7*	3.8*
Nova Scotia	1.0	1.0	2.9*	2.2*	3.9*	2.9*	7.2*	4.3*
New Brunswick	1.0	1.0	3.4*	2.5*	6.6*	4.1*	8.2*	4.4*
Quebec	1.0	1.0	2.5*	2.0*	3.6*	2.7*	5.7*	3.8*
Ontario	1.0	1.0	2.3*	1.7*	4.7*	3.1*	4.8*	2.7*
Manitoba	1.0	1.0	3.3*	2.3*	3.7*	2.2*	7.8*	4.2*
Saskatchewan	1.0	1.0	2.3*	1.6*	3.5*	2.1*	6.0*	3.1*
Alberta	1.0	1.0	2.5*	2.0*	4.3*	3.1*	5.2*	3.2*
British Columbia	1.0	1.0	1.7*	1.3	3.6*	2.5*	4.1*	2.6*
Yukon	1.0	1.0	2.3*	1.9*	2.8*	2.2*	4.1*	2.9*
Northwest Territories	1.0	1.0	3.1*	1.9*	4.1*	2.3*	6.1*	2.6*
Nunavut	1.0	1.0	2.6*	2.1*	3.2*	2.4**	7.0*	4.5*
Canada	**1.0**	**1.0**	**2.5***	**1.9***	**4.0***	**2.7***	**5.6***	**3.2***

* p<.01, statistically significant at the level 1 percent level.

** p<.05, statistically significant at the level 5 percent level.

Note: Adjusted odds control for the level of document literacy.

Source: Adult Literacy and Life Skills Survey, 2003.

The level of educational attainment shows a strong positive relationship with adult learning participation across all provinces and territories in Canada. Newfoundland and Labrador reports one of the most positive relationships between formal levels of education and adult learning participation. Its residents with university degrees or higher are 10 times more likely to participate in organized forms of adult learning than those with less than upper secondary education. Residents with the highest level of education in New Brunswick, Manitoba, Prince Edward Island, Nova Scotia and Nunavut also report a higher than average likelihood of participation than the reference group.

Once the level of literacy is controlled for, the relationship becomes attenuated uniformly for all levels of educational attainment across all regions. After the adjustment, Canadians with university degrees or higher are on average three times more likely to participate in adult education and training compared to those with less than upper secondary. Note that the variation of adjusted odds ratios across regions is quite small. Adjusted results show that formal levels of education maintain their significance in predicting participation in adult education, even when literacy skills are accounted for. This supports the hypothesis that those who have engaged in formal learning to a greater extent tend to demand organized forms of adult learning more often than those who have experienced a shorter duration of formal schooling. Alternatively, the results may be an indication that there exists a bias in the provision of adult education toward the learning needs of the well-educated (Rubenson, 1987).

2.1.3. Parents' education and participation

The previous section focused on the relationship between the respondent's own level of educational attainment and their readiness to participate in adult education and training. This relationship reflects a stratification process that starts early in life and progresses through schooling and working life. For example, there exists a strong link between an individual's level of observed literacy skills as measured in IALS and the literacy culture of the family in which an individual grows up (OECD. 1997). While the roots are established during childhood however, readiness for learning is further fostered in the educational system. The same social and cultural forces that are behind the relationship between early literacy and family background also link the distribution of educational attainment and reading and writing habits across different socio-economic groups. Through socialisation within the family and later in the school, a positive disposition towards adult education becomes a part of many people's *habitus* but not of others (Bourdieu, 1977).

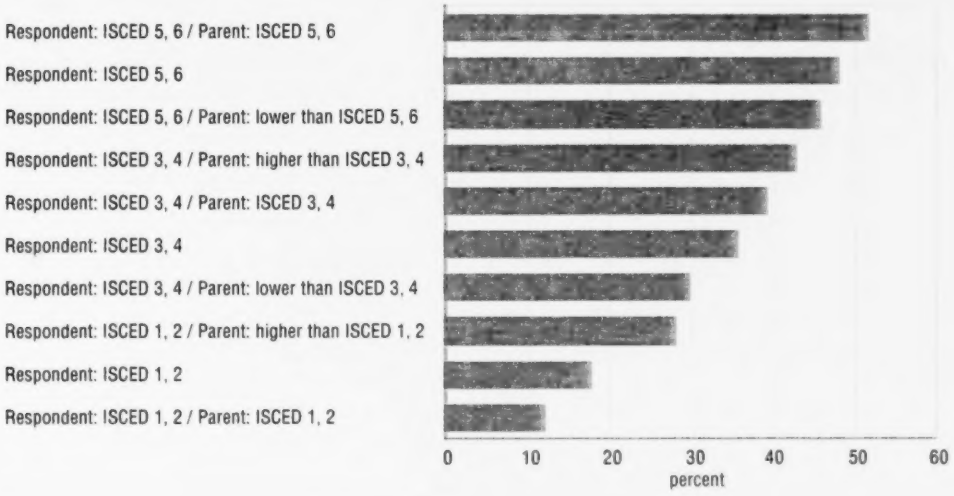
A long research tradition in status attainment models has shown that what individuals hope to achieve in their lives, particularly in their educational goals, is often mediated by their parents' values, expectations and levels of education (Andres et al., forthcoming). A recent study using IALS data shows that adult learning participation is significantly mediated by parents' levels of education (Boudard and Rubenson, 2003). The ALL data also reveal that parents' levels of education have a strong influence on respondents' participation in adult education and training. Chart 2.5 explores the compounding intergenerational effects of education on adult learning in Canada. The data demonstrate that respondents whose mothers' or fathers' educational attainment is higher than the respondents' are more likely to participate in adult leaning than those whose parents have the same level of education as the respondents. On the other hand, respondents whose parents' education is lower than theirs are less likely to participate than those whose parents have the same level of education as the respondents.

Forty-eight percent of adults with tertiary type B or higher education reported that they participated in either programmes or courses for the purpose of education and training. The data in Chart 2.5 reveal how this varies as the level of parents' educational attainment varies. The participation rate drops to 46 percent for those whose parents have less than tertiary type B or higher education, and it rises to 52 percent for those whose parents have the same education as the respondent's; in this case, tertiary type B or higher education. As evident from the data, similar differences are found across all the educational attainment levels. This pattern is particularly strong in the United States; however, the gap between adults who have a higher education but their parents' do not are minimal in Switzerland and Norway, see table 2.3.

Chart 2.5

The compounding intergenerational effect of education on adult learning in Canada

Percent of population aged 16 to 65 in adult education and training, by various combinations of respondent's own level of education and parents' level of education, Canada, 2003


Respondent: ISCED 5, 6 / Parent: ISCED 5, 6
Respondent: ISCED 5, 6
Respondent: ISCED 5, 6 / Parent: lower than ISCED 5, 6
Respondent: ISCED 3, 4 / Parent: higher than ISCED 3, 4
Respondent: ISCED 3, 4 / Parent: ISCED 3, 4
Respondent: ISCED 3, 4
Respondent: ISCED 3, 4 / Parent: lower than ISCED 3, 4
Respondent: ISCED 1, 2 / Parent: higher than ISCED 1, 2
Respondent: ISCED 1, 2
Respondent: ISCED 1, 2 / Parent: ISCED 1, 2
0
10
20
30
40
50
60
percent

Source: Adult Literacy and Life Skills Survey, 2003.

Table 2.3

The compounding intergenerational effect of education on adult learning

Percent of population aged 16 to 65 in adult education and training, by various combinations of respondent's own level of education and parents' level of education, Canada and selected countries, 2003

Respondent's level of education	Parents' level of education	**Canada**	Switzerland	Norway	United States
			percent		
ISCED 1, 2	ISCED 1, 2	**12**	21	22	11 [1]
ISCED 1, 2	Higher than ISCED 1, 2	**28**	44	34	19
ISCED 3, 4	Lower than ISCED 3, 4	**30**	42	36	24
ISCED 3, 4	ISCED 3, 4	**39**	45	48	35
ISCED 3, 4	Higher than ISCED 3, 4	**43**	60	52	40
ISCED 5, 6	Lower than ISCED 5, 6	**46**	62	61	53
ISCED 5, 6	ISCED 5, 6	**52**	63	63	61

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

2.1.4. Age and participation

In numerous empirical applications of the human capital theory, age has been noted as a substantial factor affecting the decision to invest in education and training (Becker, 1964; Benjamin, Gunderson and Riddell, 1998). The basic premise in this line of empirical research is that human capital investment decisions depend on earnings maximization. Because the return on investment in the form of earnings can only occur during their remaining working period, individuals are better off by making their investment decisions as early as possible.

Past research in the tradition of adult learning, on the other hand, has shown that learning as adults is not limited to the improvement of career prospects (Rubenson, 2001). Some adults engage in adult learning for personal interest; in this case, age may not be an important factor to the participation decision. Further, there are reasons to believe that the predicted relationship does not necessarily hold in sectors where technological and organizational structures shift rapidly. Thus, the implication of age in adult learning is somewhat complicated. This section attempts to provide a general overview of the participation pattern by age, but in the future, more in-depth analysis could be pursued by examining the impact of age in different occupational sectors and also in relation to learning for personal interest reasons.

International comparisons

Table 2.4 shows that younger respondents participate more frequently in adult education and training across all countries. The results, complying with the prediction of human capital theory, vary little across countries.

Table 2.4

Likelihood of participating in organized forms of adult learning by age

Unadjusted and adjusted odds ratios showing the likelihood of adults aged 16 to 65 receiving adult education and training, by age groups, Canada and selected countries, 2003

	Canada		Switzerland		Norway		United States	
Age groups	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds	Unadjusted odds	Adjusted odds
	ratio		ratio		ratio		ratio	
16 to 25	2.3*	2.8*	4.3*	5.6*	2.7*	3.7*	2.0*	2.9*
26 to 35	3.3*	2.8*	3.1*	2.9*	3.2*	2.6*	2.3*	2.3*
36 to 45	2.7*	2.5*	2.8*	2.6*	2.6*	2.2*	2.1*	1.9*
46 to 55	2.2*	2.1*	2.1*	2.1*	1.9*	1.8*	2.2*	2.1*
56 to 65	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

* p<.01, statistically significant at the level 1 percent level.

Note: Adjusted odds ratios control for education.

Source: Adult Literacy and Life Skills Survey, 2003.

Looking at the unadjusted odds ratios, it is noteworthy that the younger Swiss experience more intensive adult learning engagement than older groups. In the United States, younger age groups (ranging from 16 to 25 and 46 to 55) are more likely to participate to about the same extent when compared to the reference age group of 56 to 65. In Canada and Norway, the odds of participating decrease steadily as the age level increases.

When education is controlled for, it is interesting to note that the odds ratios of the youngest group (16 to 25) across all countries increase. It is not the case for other age groups; the odds ratios instead go down. This finding indicates that being part of the youngest group matters more for predicting the likelihood of participating in adult education and training than the actual level of education of the young. In contrast, the level of education is a more important predictor among older groups. Overall, the results support the human capital explanation that younger individuals are more likely to invest in their education and training when compared to older age groups.

Provincial and territorial comparisons

From Table 2.4, we find that Canada is quite unique in featuring a comparatively higher participation rate among adults aged 26 to 35. In particular, we see in Table 2.5 that Newfoundland and Labrador stands out. In Prince Edward Island, Nova Scotia, Quebec and Ontario, those who are 26 to 35 years old also show higher than average likelihoods in relation to those who are over 56.

Table 2.5

Likelihood of participating in organized forms of adult learning by age in Canada

Unadjusted and adjusted odds ratios showing the likelihood of adults aged 16 to 65 receiving adult education and training, by age groups, Canada and jurisdictions, 2003

	Age groups									
	16 to 25		26 to 35		36 to 45		46 to 55		56 to 65	
	Unadjusted odds ratio	Adjusted odds ratio	Unadjusted odds ratio	Adjusted odds ratio	Unadjusted odds ratio	Adjusted odds ratio	Unadjusted odds ratio	Adjusted odds ratio	Unadjusted odds ratio	Adjusted odds ratio
Newfoundland and Labrador	4.0*	4.4*	4.5*	3.6*	3.9*	3.6*	3.1*	3.1*	1.0*	1.0*
Prince Edward Island	1.8*	2.1	4.6	3.5*	2.4*	2.1**	2.8*	2.3*	1.0*	1.0*
Nova Scotia	2.4*	3.3*	4.3*	3.9*	3.2*	3.5*	2.7*	2.6*	1.0*	1.0*
New Brunswick	2.6*	2.8*	3.1*	2.5*	2.7*	2.3*	1.5*	1.3	1.0**	1.0*
Quebec	3.0*	3.8*	3.9*	3.3*	3.3*	3.1*	2.7*	2.6*	1.0*	1.0*
Ontario	2.3*	2.5*	4.3*	3.2*	2.9*	2.4*	2.3*	2.0*	1.0*	1.0*
Manitoba	1.5*	2.0*	2.8**	2.5*	2.0*	1.9*	1.8*	1.8*	1.0*	1.0*
Saskatchewan	2.3*	3.3*	2.5*	2.5*	2.3*	2.2*	1.8*	1.7**	1.0*	1.0*
Alberta	1.9*	2.3*	2.5*	2.3*	2.4*	2.2*	2.3*	2.1*	1.0*	1.0*
British Columbia	2.4*	3.1*	2.7*	2.3*	2.8*	2.4*	2.6*	2.3*	1.0*	1.0*
Yukon	1.6**	1.9**	1.8	1.7**	1.9*	1.7*	1.9*	1.7**	1.0*	1.0
Northwest Territories	0.6**	1.1	1.2	1.4	1.4	1.6	1.0	1.1	1.0	1.0
Nunavut	2.0*	2.8**	3.5	3.8*	3.0*	3.0*	2.5*	2.0	1.0**	1.0*
Canada	**2.0***	**3.0***	**3.0***	**3.0***	**3.0***	**2.0***	**2.0***	**2.0***	**1.0***	**1.0***

* p<.01, statistically significant at the level 1 per cent level.

** p<.05, statistically significant at the level 5 per cent level.

Note: Adjusted odds ratios control for education.

Source: Adult Literacy and Life Skills Survey, 2003.

Participation among older Canadian adults

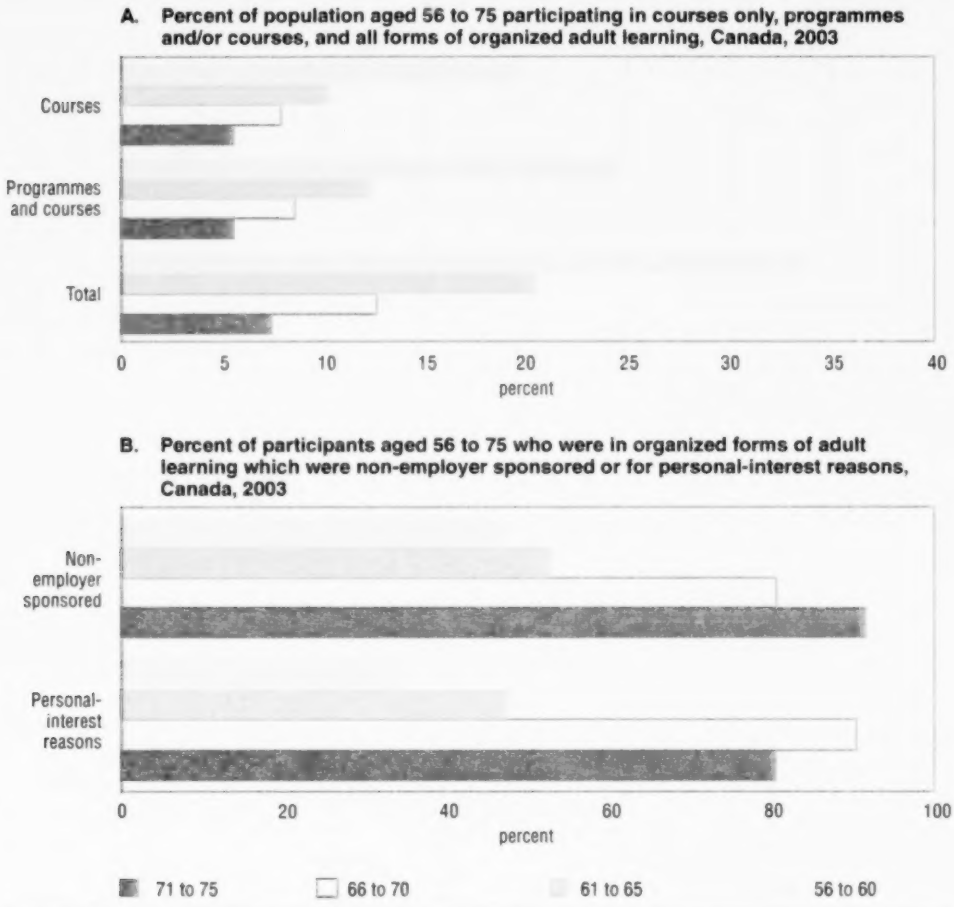
Because of demographic changes and the accompanying aging of the workforce it is estimated that by 2025, Canada will have a labour shortage of 1.2 million skilled workers (Conference Board of Canada, 2005). It is expected that this will result in efforts to encourage a growing number of older adults to remain in the labour force. In this context it is of interest to look closer at the participation rate of adults aged 55 and older. Fortunately the Canadian ALL also collected information from older adults.

Chart 2.6 shows, as can be expected, that as people age, they engage less in learning and become even less involved with career-related learning. Total participation in organized forms of adult learning declines rapidly from 34 percent for Canadians aged 56 to 60, to 20 percent for those aged 61 to 65, to 13 percent for those aged 66 to 70, and seven percent for those aged 71 to 75. Participation in courses is observed at slightly lower rates. Participating for personal interest reasons becomes significant for those who are retired or reaching their retirement. Over 80 percent of participants over 65 cited this reason for participation. Similarly, as participants get older, self-financing begins to be the pervasive form of financing. Over 80 percent of participants relied on financing from non-employer sources. These results suggest that adult learning does not come to an abrupt end as Canadians exit the labour market; rather, the intensity of their participation gradually reduces while the reason for, and subject of, learning shifts.

In general, the characteristics of older adult learners resemble the characteristics of participants in other age groups (see Table B1.4 in Annex B). Similar to participants in other age groups, the elder who have higher levels of education are more likely to participate in adult learning. Older adults aged 56 to 75 who have not completed upper secondary education participated at eight percent while those with university degrees or higher participated at 41 percent. Also, older adults who are active in either paid or unpaid work tend to be more active participants in adult learning. Employed older workers participated at 38 percent, while those who were outside the labour force participated at 12 percent. Workers in knowledge and information (high and low skill) sectors participated more often than those in other occupational categories. In terms of income levels, people from families with more than CAN$60,000 in annual household income are more likely to participate than those with lower income. In relation to unpaid work activities, those who were more active in community organizations either as volunteers or non-volunteers were more likely to participate in adult learning. Likewise, people who were more active in reading, using internet and using computers for task-oriented purposes outside paid work, engage more frequently in all forms of adult learning. These findings suggest that adult learning is a complement, not a substitute for civic participation or other forms of self-directed learning activities.

Chart 2.6

Participation of older Canadian adults in adult education and training



Source: Adult Literacy and Life Skills Survey, 2003.

2.1.5. Gender and participation

International comparisons

There are only minor gender differences in participation. In Canada and Norway, after controlling for age, labour force status, educational attainment, document literacy levels, immigrant status and type of occupation, there is only a slight over-representation of men in adult education and training.

Table 2.6

Likelihood of participating and participation rates in organized forms of adult learning by gender

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 receiving adult education and training, by gender, Canada and selected countries, 2003

	Participation rate		Unadjusted odds		Adjusted odds	
	Men	Women	Men	Women	Men	Women
	percent		ratio		ratio	
Total						
Canada	**49**	**50**	**1.0**	**1.1****	**1.0**	**1.2***
Switzerland	60	54	1.0	0.8*	1.0	1.1
Norway	52	54	1.0	1.2*	1.0	1.4*
United States	55	54	1.0	1.0	1.0	1.1
Programmes						
Canada	**16**	**16**	**1.0**	**1.1**	**1.0**	**1.1**
Switzerland	21	18	1.0	0.8*	1.0	0.9
Norway	20	22	1.0	1.3*	1.0	1.4*
United States	20	20	1.0	1.0	1.0	1.0
Courses						
Canada	**24**	**26**	**1.0**	**1.1****	**1.0**	**1.2***
Switzerland	41	40	1.0	0.9	1.0	1.3*
Norway	30	31	1.0	1.1	1.0	1.2**
United States	20	22	1.0	1.1	1.0	1.2**
Other						
Canada	**12**	**13**	**1.0**	**1.0**	**1.0**	**1.1***
Switzerland	8	8	1.0	0.9	1.0	1.1
Norway	8	7	1.0	0.9	1.0	0.9
United States	18	16	1.0	0.9	1.0	1.0

* $p<.01$, statistically significant at the level 1 percent level.

** $p<.05$, statistically significant at the level 5 percent level.

Note: Adjusted odds ratios control for: age, education, document literacy levels, labour force status, immigrant status, and type of occupation.

Source: Adult Literacy and Life Skills Survey, 2003.

Provincial and territorial comparisons

Table 2.7 reports participation by gender for different forms of adult learning across Canada. In terms of total participation, gender gaps are pronounced in provinces such as Saskatchewan and the Northwest Territories, but in general, the differences are negligible. The unadjusted and adjusted odds ratios further indicate that the gender differences are statistically insignificant in most provinces and territories (See Table B1.5 in Annex B).

Table 2.7

Participation rates in organized forms of adult learning by gender

Percent of population aged 16 to 65 participating in adult education and training courses, programmes and other forms of adult education and training, by gender, Canada and jurisdictions, 2003

	Total		Programmes		Courses		Other	
	Women	Men	Women	Men	Women	Men	Women	Men
	percent		percent		percent		percent	
Newfoundland and Labrador	34	38	11	13	14	14	12	12
Prince Edward Island	46	43	16	14 [1]	19	22	13	10 [1]
Nova Scotia	55	51	19	16	30	29	12	11
New Brunswick	46	43	13	13	20	19	14	14
Quebec	43	43	12	12	24	24	9	11
Ontario	52	47	16	16	24	21	15	13
Manitoba	50	49	18	16	26	21	12	14
Saskatchewan	48	57	16	24	25	28	12	7
Alberta	53	56	15	19	31	31	12	11
British Columbia	57	57	20	20	32	31	12	11
Yukon	59	52	19	24	29	30	15	7
Northwest Territories	58	50	23	18	30	25	11	12
Nunavut	43	37	21	13	18	19	7 [1]	8 [1]
Canada	**50**	**49**	**16**	**16**	**26**	**24**	**13**	**12**

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

2.1.6. Immigration and participation

International comparisons

The integration of immigrants into host countries has arisen as an important policy issue in most of the countries included in this report. Past studies have pointed out that adult education and training is one of the most critical parts of the system in assisting the integration of immigrants into their newly adopted labour markets (Hum & Simpson, 2003). This section provides a snapshot of adult education and training gaps between native-born and foreign-born adults.

Table 2.8 suggests that immigrants in Canada, Switzerland and the United States are less likely to participate than native-born adults. Judging from the adjusted odds for total participation, the discrepancy is most noticeable in the United States (1.8 times). Three things are worth noting. First, there are no significant differences in Norway. Second, as indicated by the fact that in Canada the adjusted odds ratio, which controls for differences in education, age, labour force participation and occupation, is slightly higher than the unadjusted odds ratio, the advantage of native-born adults is somewhat higher than the participation rate indicates. Third, the major difference lies with participation in courses while participation in programmes and "other" activities are more or less similar.

Table 2.8

Likelihood of participating and participation rates in organized forms of adult learning by immigration status

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 participating in various organized forms adult learning, by immigration status, Canada and selected countries, 2003

	Total participation rate		Unadjusted odds		Adjusted odds	
	Immigrants	Native-borns	Immigrants	Native-borns	Immigrants	Native-borns
	percent		ratio		ratio	
Total						
Canada	**43**	**51**	**1.0**	**1.1***	**1.0**	**1.3***
Switzerland	46	60	1.0	1.7*	1.0	1.5*
Norway	50	54	1.0	1.2	1.0	1.2
United States	41	57	1.0	2.1*	1.0	1.8*
Programmes						
Canada	**15**	**16**	**1.0**	**1.0**	**1.0**	**0.9**
Switzerland	19	20	1.0	1.4*	1.0	1.1
Norway	22	21	1.0	0.9	1.0	1.0
United States	15	21	1.0	1.4*	1.0	1.3
Courses						
Canada	**18**	**27**	**1.0**	**1.3***	**1.0**	**1.5***
Switzerland	28	44	1.0	1.7*	1.0	1.6*
Norway	24	31	1.0	1.3**	1.0	1.1
United States	14	22	1.0	2.0*	1.0	1.7*
Other						
Canada	**12**	**12**	**1.0**	**1.0**	**1.0**	**1.1**
Switzerland	7	8	1.0	1.3	1.0	1.3
Norway	9[1]	7	...	...	...	...
United States	13	18	1.0	1.5*	1.0	1.4

... not applicable

* $p<.01$, statistically significant at the level 1 percent level.

** $p<.05$, statistically significant at the level 5 percent level.

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Note: Adjusted odds ratios control for: age, education, document literacy levels, gender, labour force status and type of occupation.

Source: Adult Literacy and Life Skills Survey, 2003.

Provincial and territorial comparisons

Table 2.9 shows that in the Atlantic region native-born adults participate less often in adult education and training than immigrants. However, as indicated by the adjusted odds ratios, when differences in level of education, age, labour force status and occupation are adjusted for, there are no significant differences. In the other three regions, native-born adults are slightly more likely to participate. Immigrants are not a homogeneous group so further analysis is needed to obtain a more complete picture of the patterns of participation among this group. Table B1.6 in Appendix B reports participation rates and odds ratios for recent immigrants (i.e., lived in Canada for less than five years) vs established immigrants. Overall, recent immigrants display a similar participation rate (52 percent) to native-born Canadians (51 percent), which is substantially higher than established immigrants (41 percent). Due to small sample sizes, a comparison by jurisdiction is not possible.

Table 2.9

Likelihood of participating and participation rates in organized forms of adult learning by immigration status in Canada

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 participating in various organized forms adult learning, by immigration status, Canada and jurisdictions, 2003

	Total participation rate		Unadjusted odds		Adjusted odds	
	Immigrants	Native-borns	Immigrants	Native-borns	Immigrants	Native-borns
	percent		ratio		ratio	
Total						
Atlantic region	62	45	1.0	0.6*	1.0	1.0
Quebec	42	43	1.0	1.1	1.0	1.2
Ontario	41	54	1.0	1.3*	1.0	1.4*
Western region	46	57	1.0	1.3*	1.0	1.2**
Canada	**43**	**51**	**1.0**	**1.1***	**1.0**	**1.3***
Programmes						
Atlantic region	27[1]	14	...	...	...	...
Quebec	13	12	1.0	0.7*	1.0	0.7**
Ontario	15	17	1.0	0.9	1.0	1.0
Western region	16	19	1.0	1.2	1.0	1.0
Canada	**15**	**16**	**1.0**	**1.0**	**1.0**	**0.9**
Courses						
Atlantic region	31	22	1.0	0.6*	1.0	1.1
Quebec	21	24	1.0	1.3**	1.0	1.5*
Ontario	15	26	1.0	1.6*	1.0	1.7*
Western region	22	32	1.0	1.2**	1.0	1.2
Canada	**18**	**27**	**1.0**	**1.3***	**1.0**	**1.5***
Other						
Atlantic region	12[1]	13	...	...	...	...
Quebec	10	10	1.0	1.3	1.0	1.3
Ontario	13	14	1.0	1.1	1.0	1.1
Western region	11	12	1.0	1.1	1.0	1.1
Canada	**12**	**12**	**1.0**	**1.0**	**1.0**	**1.1**

... not applicable

* $p<.01$, statistically significant at the level 1 percent level.

** $p<.05$, statistically significant at the level 5 percent level.

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Note: Adjusted odds ratios are controlled for age, education, document literacy levels, gender, labour force status and occupation type.

Source: Adult Literacy and Life Skills Survey, 2003.

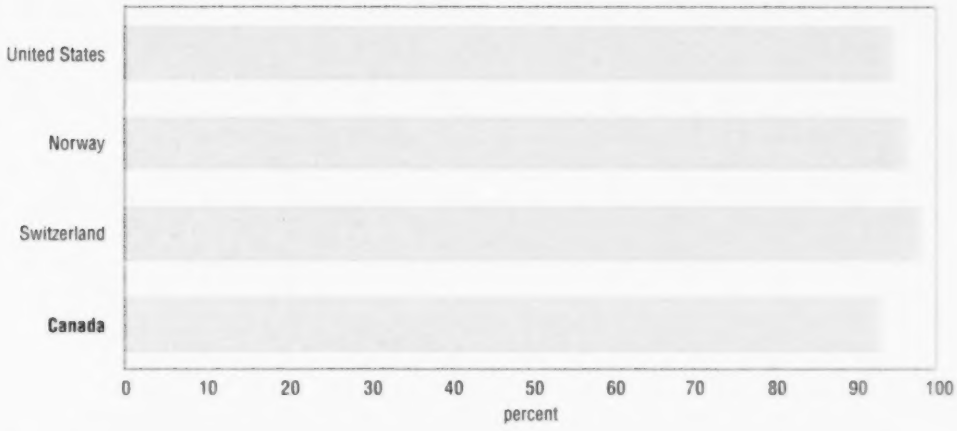
2.2. Inequalities in informal learning

The literature on informal learning tends to stress that the 'law of inequality' does not seem to apply to this mode of learning (see, e.g., Livingstone, 1999a). But findings from ALL suggest that the relationship is more complex than some of the recent research would suggest. Chart 2.7 clearly demonstrates that in all four countries almost all adults engage in at least one of the nine informal learning activities identified in the ALL questionnaire. In this respect the data show that informal learning is more or less a universal activity. You exist thus you learn.

Chart 2.7

Engagement in at least one type of informal learning activity

Percent of population aged 16 to 65 who engaged in at least one type of informal learning activity during the year preceding the interview, Canada and selected countries, 2003



Source: Adult Literacy and Life Skills Survey, 2003.

If one goal of adult learning is to bring about parity in standards of living however, it is vital that the learning activity contributes to the individual's resources of for example, money, property, knowledge, psychological and physical energy, social relations, security, etc., so that the individual can control and consciously govern his or her life. To do so, it is necessary that those with limited resources be recruited and that education, directly or indirectly, promotes the creation of these resources. So far, there is limited research on the extent to which different forms of informal learning contribute to strengthening these resources. In this context, it is of interest to note that vulnerable groups, as identified by educational attainment and literacy skills, report a substantially lower engagement in many of the informal activities for which data were made available by ALL, see Table 2.10.

Table 2.10

Engagement in various informal learning activities by literacy

Percent of population aged 16 to 65 who engaged in various informal learning activities during the year preceding the interview, by literacy level, Canada and selected countries, 2003

	Level 1	Level 2	Level 3	Level 4/5
			percent	
Visit fairs, conferences or congresses				
Canada	**12**	**26**	**37**	**48**
Switzerland	23	36	43	52
Norway	15	26	34	41
United States	10	22	35	46
Attend lectures, seminars or special talks				
Canada	**15**	**34**	**47**	**62**
Switzerland	30	44	61	70
Norway	22	36	51	60
United States	19	36	51	67
Read manuals, reference or other materials				
Canada	**35**	**59**	**74**	**86**
Switzerland	76	82	90	95
Norway	41	59	77	89
United States	35	59	77	89
Go on guided tours (museums, galleries etc)				
Canada	**13**	**25**	**34**	**44**
Switzerland	31	42	49	47
Norway	21	25	32	37
United States	17	26	37	42
Use computers or the Internet to learn				
Canada	**27**	**54**	**73**	**85**
Switzerland	43	53	65	72
Norway	32	51	72	83
United States	31	57	81	90
Use video, television, tapes to learn				
Canada	**33**	**45**	**51**	**60**
Switzerland	37	34	37	34
Norway	42	38	45	51
United States	33	50	61	65
Learn by watching, getting help from others				
Canada	**59**	**74**	**82**	**89**
Switzerland	80	84	90	91
Norway	58	66	82	85
United States	66	76	85	92
Learn by yourself, trying different ways				
Canada	**75**	**85**	**91**	**96**
Switzerland	84	87	93	92
Norway	84	87	93	95
United States	80	90	94	98
Learn by being sent around an organization				
Canada	**13**	**21**	**27**	**32**
Switzerland	30	33	42	44
Norway	13	20	24	27
United States	19	25	32	32

Source: Adult Literacy and Life Skills Survey, 2003.

Four findings are particularly noteworthy. First, there are only relatively minor differences on the items referring to very general and broad categories of informal learning like learning by doing and learning by watching, which in and of themselves can refer to almost anything. Second, the level of inequality, although rampant in all four countries, is more pronounced in Canada and the United States than in Switzerland or Norway. Third, it is disturbing, although not surprising, that the major differences occur in activities which can be expected to improve a person's literacy capability like reading manuals, reference or other materials, or attending seminars and talks. Finally, odds ratios indicate that those who have document literacy skills at Level 3 or higher are more likely to engage in informal learning that involves reading reference materials and using computers, and are slightly more likely to engage in learning by themselves. Not surprisingly, a similar pattern is found if the comparison looks at the impact of educational attainment on informal learning (see Table B1.7 in Annex B).

While active informal learning seems to be related to one's level of education it is worthwhile to note that, with some minor variations, it is unrelated to age (see Table 2.11). In this respect, the pattern differs from organized forms of learning where age plays more of a role.

In summary, the ALL findings on informal learning suggest that initial formal education and foundation skills such as literacy skills as measured in IALS and ALL are major factors influencing the opportunity to engage in some important forms of informal learning. It also implies that it may not be wise to rely on informal learning alone to substitute for low levels of initial education, or adult education and training. Merely learning in the course of daily life without some systematic prior reinforcement, such as formal education, may not be sufficient for gaining knowledge and skills. It is probably also more difficult to convert what is learned passively into economic and social value (Svensson, Ellström and Åberg, 2004).

Table 2.11

Engagement in various informal learning activities by age

Percent of population aged 16 to 65 who engaged in various informal learning activities during the year preceding the interview, by age group, Canada and selected countries, 2003

Informal learning activities	16 to 25	26 to 35	36 to 45	46 to 55	56 to 65
			percent		
Visit fairs, conferences or congresses					
Canada	**22**	**35**	**34**	**36**	**25**
Switzerland	24	38	47	43	35
Norway	32	31	37	32	26
United States	17	25	28	36	26
Attend lectures, seminars or special talks					
Canada	**29**	**44**	**43**	**46**	**34**
Switzerland	39	51	57	58	50
Norway	38	50	54	47	39
United States	32	41	43	50	39
Read manuals, reference or other materials					
Canada	**54**	**72**	**68**	**68**	**56**
Switzerland	85	88	87	86	83
Norway	75	76	77	70	62
United States	55	65	65	72	63
Go on guided tours (museums, galleries etc)					
Canada	**25**	**32**	**30**	**31**	**27**
Switzerland	51	38	42	44	51
Norway	29	24	29	34	37
United States	24	29	31	34	28
Use computers or the Internet to learn					
Canada	**68**	**72**	**66**	**60**	**42**
Switzerland	70	65	62	56	44
Norway	72	74	72	65	46
United States	64	71	67	63	53
Use video, television, tapes to learn					
Canada	**47**	**53**	**49**	**49**	**39**
Switzerland	43	38	35	35	29
Norway	55	46	45	46	35
United States	49	53	53	56	46
Learn by watching, getting help from others					
Canada	**80**	**83**	**79**	**77**	**65**
Switzerland	95	87	89	86	77
Norway	83	78	82	76	63
United States	77	85	80	81	70
Learn by yourself, trying different ways					
Canada	**87**	**90**	**89**	**88**	**81**
Switzerland	95	90	91	89	84
Norway	95	92	94	90	84
United States	90	92	91	92	85
Learn by being sent around an organization					
Canada	**25**	**27**	**25**	**24**	**16**
Switzerland	43	34	39	38	36
Norway	25	25	25	24	14
United States	33	28	28	27	20

Source: Adult Literacy and Life Skills Survey, 2003.

2.3. Vulnerable groups

It can be inferred from the above discussion that there is a tendency for those who have low levels of literacy skills, whose parents' have low levels of education, are older, low-educated, women or immigrants to be the least likely to participate in adult education and training. Those having low levels of literacy skills and low levels of educational attainment are also the least likely to engage in informal learning activities, especially the forms that are meaningful for enabling resources. This pattern is consistent across countries, although there is evidence that the observed inequalities are attenuated in some countries more so than in others. Additionally, it will be seen below and in Chapter 3 that adults who are either not in the labour force, are unemployed, or are employed in low skill jobs, also show a comparative disadvantage when it comes to participating in organized forms of adult learning.

Being in one of the above mentioned vulnerable groups does not mean exclusion from one or more others – on the contrary; in many cases people belong to more than one group at the same time. The following analysis demonstrates that when this is the case, inequalities are exacerbated. The ALL data for Canada are presented in Table 2.12 for a number of population sub-groups which highlight the large differences in participation rates when people belong to more than one group. A closer look is taken at adults who:

- Have low literacy skills
- Are older
- Have not completed upper secondary education
- Live in households with comparatively low levels of total income
- Are not in the labour force

These are groups of adults that feature among the lowest participation rates in adult education and training. Adults within these groups feature participation rates lower than or close to 20 percent. Therefore, it is of interest to take a closer look at the characteristics of persons in these groups.

In carrying out the following analysis it became evident that literacy skills as measured in IALS and ALL are a key distinguishing characteristic even among adults within particularly vulnerable groups. That is, in nearly every case, adults within specific vulnerable groups who have medium to high literacy skills (Levels 3 and 4/5) are substantially more likely to participate in adult education and training than adults in the same group who instead have low literacy skills (Levels 1 and 2). This points to the significance of literacy skills in facilitating individuals' capabilities of coping with, and participating in, the emerging knowledge society and information economy, even among adults considered to be the most vulnerable to exclusion. It also suggests the importance and urgency of supporting adult basic skills programmes.

The following profiles are derived from Table 2.12 – they outline the combinations of characteristics that are most strongly associated with being vulnerable to complete exclusion from the potential benefits of adult learning:

Characteristics of older adults aged 56 to 65 who feature low participation rates

Older adults with low literacy skills (Levels 1 and 2) as well as featuring one or more of the following characteristics are particularly vulnerable (see column B in Table 2.12, participation rate for group featuring these characteristics in parentheses):

- Did not complete upper secondary education (11%)
- Parents' did not complete upper secondary education (18%)
- Low level of household income (14 and 19% for two lowest quintiles)
- Men (18% vs 22% for women)
- Non-immigrant (19% vs 23% for immigrant)
- Not in labour force or unemployed (11% and 12% respectively)
- Employed in goods manufacturing (20%)
- Employed as manager with a low level supervisory function (18%)
- Reads very little or not at all outside of work (17%)
- Engages very little or not at all in community groups or organizations (17%)

Characteristics of low educated adults who feature low participation rates

Adults who did not complete upper secondary education and who have low literacy skills (Levels 1 and 2) as well as featuring one or more of the following characteristics are particularly vulnerable (see column C in Table 2.12, participation rate for group featuring these characteristics in parentheses):

- Over the age of 45 (18% for group 46 to 55 and 11% for group 56 to 65)
- Parents' did not complete upper secondary education (17%)
- Low level of household income (19% for two lowest quintiles)
- Women (20% vs 23% for men)
- Immigrant (17% vs 23% for non-immigrant)
- Lives in the city (20% vs 26% for those who live in rural areas)
- Not in labour force or unemployed (10% and 16% respectively)
- Employed as manager with a low level supervisory function (19%)
- Reads very little or not at all outside of work (22%)
- Engages very little or not at all in community groups or organizations (19%)

Characteristics of adults in low income households who feature low participation rates

Adults who have a low level of total household income (lowest quintile) and who have low literacy skills (Levels 1 and 2) as well as featuring one or more of the following characteristics are particularly vulnerable (see column E in Table 2.12, participation rate for group featuring these characteristics in parentheses):

- Over the age of 45 (17% for group 46 to 55 and 14% for group 56 to 65)
- Did not complete upper secondary education (19%)
- Parents' did not complete upper secondary education (22%)
- Does not live in the city (20% vs 27% for those who live in urban areas)
- Not in labour force or unemployed (16% and 21% respectively)

Characteristics of adults NOT in the labour force who feature low participation rates

Adults who are not in the labour force and who have low literacy skills (Levels 1 and 2) as well as featuring one or more of the following characteristics are particularly vulnerable (see column F in Table 2.12, participation rate for group featuring these characteristics in parentheses):

- Over the age of 45 (14% for group 46 to 55 and 11% for group 56 to 65)
- Completed upper secondary or less (10% and 20% respectively)
- Parents' did not complete upper secondary education (12%)
- Low- to mid-level of household income (about 15%)
- Reads very little or not at all outside of work (16%)
- Engages very little or not at all in community groups or organizations (13%)

Table 2.12

Participation in adult education and training and vulnerable groups

Percent of population aged 16 to 65 receiving adult education and training during the year preceding the interview, by specific vulnerable groups, and by low literacy (Level 1 and 2) and medium to high literacy (Levels 3 and 4/5), document literacy scale, Canada, 2003

	(A) Adults 16 to 65		(B) Adults 56 to 65		(C) Low education		(D) Low socioeconomic origin	
	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy
Total	35	60	20	41	21	38	31	53
	percent		percent		percent		percent	
Age								
16 to 25	42	57	...	...	35	39	31	44
26 to 35	45	66	...	...	33	43	39	48
36 to 45	39	63	...	...	28	44	38	63
46 to 55	36	62	...	...	18	35	32	56
56 to 65	20	41	...	...	11	23	18	38
Education level								
Less than upper secondary	21	38	11	23	...	...	17	33
Upper secondary	36	55	24	32	...	...	34	48
More than upper secondary	49	66	34	49	...	...	50	60
Parents' education level								
Less than upper secondary	31	53	18	38	17	33	...	...
Upper secondary	40	62	28	46	36	38	...	...
More than upper secondary	46	64	27	44	39	44	...	...
Household income level								
Lowest quintile	26	50	14	20	19	45	35	55
Next to lowest quintile	30	50	19	29	19	38	30	51
Middle quintile	35	57	22	42	25	43	37	58
Next to highest quintile	40	69	18	46	30	45	37	72
Highest quintile	60	72	40	56	36	48	67	72
Gender								
Men	33	60	18	39	23	36	36	62
Women	37	61	22	44	20	42	42	63
Immmigration status								
Immigrant	33	57	23	48	17	20	33	60
Non-immigrant	36	61	19	39	23	39	42	63
Community size								
Rural	34	57	20	43	26	38	43	56
Urban	35	61	19	36	20	38	39	64
Labour force status								
Not in labour force	18	34	11	28	10	23	29	34
Unemployed	25	38	12	14	16	41	30	44
Employed	43	66	31	53	29	44	44	67
Occupational type								
Knowledge experts	51	63	41	48	x	x	46	60
Managers	41	63	18	29	19	35	43	65
Information high skill	55	75	34	55	31	38	59	77
Information low skill	49	60	38	48	34	58	44	62
Low skill services	33	55	25	39	25	39	39	55
Goods manufacturing	33	55	20	41	24	36	36	60
Literacy practice at work								
Low level engagement	36	55	25	38	28	34	36	56
High level engagement	59	73	50	61	43	60	59	73
Literacy practice at home								
Low level engagement	32	54	17	27	22	36	35	58
High level engagement	48	65	32	48	30	40	50	65
Community engagement								
Low level engagement	32	57	17	34	19	37	35	58
High level engagement	46	66	29	48	34	42	54	69

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Source: Adult Literacy and Life Skills Survey, 2003.

Table 2.12

Participation in adult education and training and vulnerable groups (concluded)

Percent of population aged 16 to 65 receiving adult education and training during the year preceding the interview, by specific vulnerable groups, and by low literacy (Level 1 and 2) and medium to high literacy (Levels 3 and 4/5), document literacy scale, Canada, 2003

	(E) Low income		(F) Not in labour force		(G) Low skill goods and services	
	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy	Low literacy	Medium to high literacy
Total	26	50	18	34	33	55
			percent			
Age						
16 to 25	43	64	31	38	44	49
26 to 35	37	53	31	46	40	60
36 to 45	30	53	26	31	32	57
46 to 55	17	45	14	35	31	55
56 to 65	14	20	11	28	22	41
Education level						
Less than upper secondary	19	45	10	23	25	37
Upper secondary	27	42	20	29	34	52
More than upper secondary	37	57	29	41	44	63
Parents' education level						
Less than upper secondary	22	43	12	28	28	48
Upper secondary	35	55	29	34	37	58
More than upper secondary	33	52	28	42	47	57
Household income level						
Lowest quintile	...	...	17	37	26	52
Next to lowest quintile	...	...	16	33	29	47
Middle quintile	...	...	15	33	32	51
Next to highest quintile	...	...	23	50	37	68
Highest quintile	...	...	38	34	52	68
Gender						
Men	26	53	16	34	33	55
Women	26	48	19	34	33	56
Immmigration status						
Immigrant	31	52	20	42	29	56
Non-immigrant	22	50	17	32	34	55
Community size						
Rural	20	41	16	29	36	54
Urban	27	53	18	35	32	55
Labour force status						
Not in labour force	16	33	...	...	...	...
Unemployed	21	33	...	...	...	...
Employed	37	55	...	...	...	...
Occupational type						
Knowledge experts	x	51	...	...	...	...
Managers	27	47	...	...	...	...
Information high skill	43	66	...	...	...	...
Information low skill	50	51	...	...	...	...
Low skill services	31	51	...	...	...	...
Goods manufacturing	28	45	...	...	...	...
Literacy practice at work						
Low level engagement	35	51	...	...	33	48
High level engagement	54	60	...	...	52	71
Literacy practice at home						
Low level engagement	27	46	16	28	33	50
High level engagement	44	54	28	38	44	62
Community engagement						
Low level engagement	27	50	13	32	31	51
High level engagement	43	46	30	37	41	63

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Source: Adult Literacy and Life Skills Survey, 2003.

Chapter 3
Adult learning and the world of work

This chapter examines the relationship between adult learning and the world of work. First, evidence of the overwhelming domination of job-related reasons for participation in adult education and training is provided. This is followed by an examination of the impact of labour force status as well as job and workplace characteristics on participation in adult education and training. The final section presents a review of the relationship between actual skill use and participation including the impact of a skills surplus and a skills shortage on participation in both organized and informal forms of adult learning.

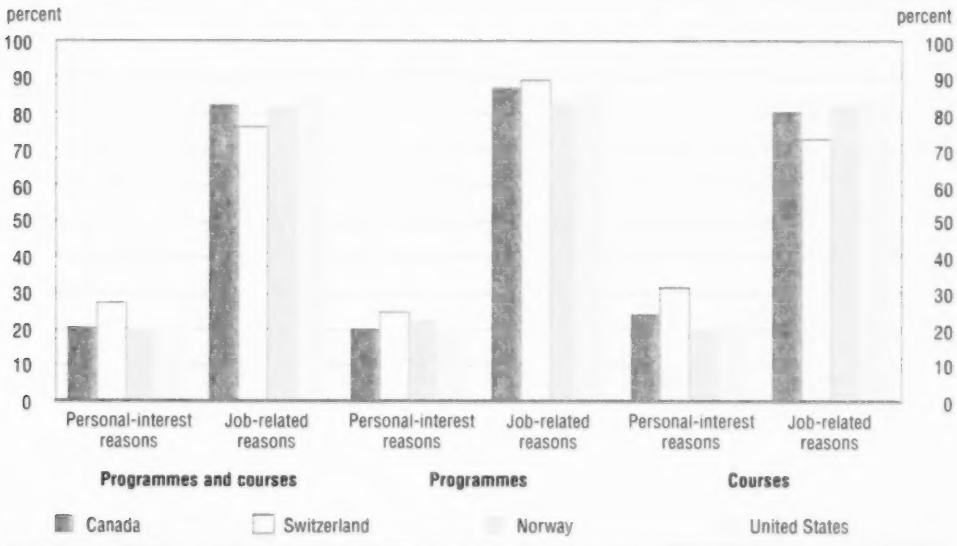
3.1. Reasons for participating in courses and programmes

The ALL registers the reasons for participating in courses and programmes and distinguishes between adult education and training taken for job-related or personal interest reasons.

Chart 3.1

Reasons for participating in adult education and training

Percent of participants aged 16 to 65 taking adult education and training for various reasons, by different forms of adult learning, Canada and selected countries, 2003



Source: Adult Literacy and Life Skills Survey, 2003.

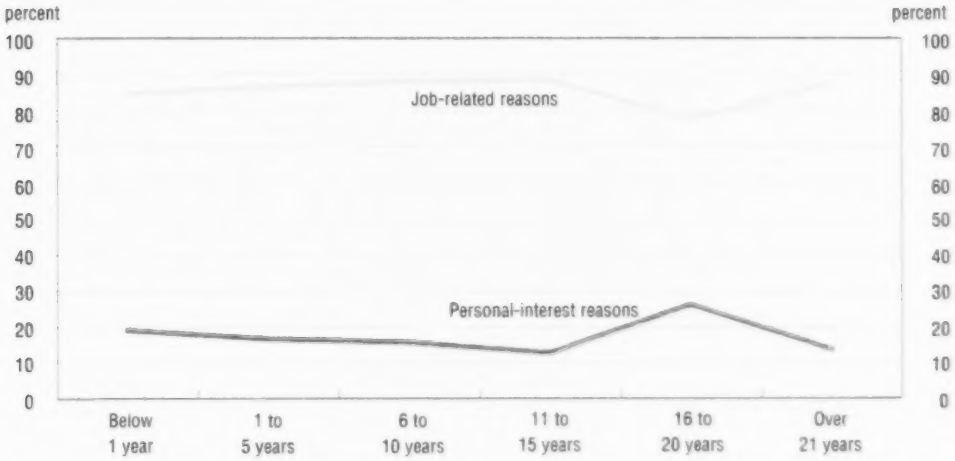
The data in Chart 3.1 disclose how strongly participation in adult education and training has become linked to the world of work. Three findings stand out. First, job-related reasons dominate more or less to the same extent in all four countries. Second, the emphasis of job-related reasons is particularly noticeable among those participating in programmes, but is also overriding among course participants. Third, it is more common for the Swiss to enrol in a course because of personal reasons than Americans, Canadians or Norwegians.

Chart 3.2 shows that reasons for participating in adult education and training among Canadians vary with job tenure. The data show that the total dominance of work-related reasons for participating in adult education and training remains unchanged over a person's entire working life. It is notable that close to 90 percent of Canadians with a job tenure of more than 21 years, who reported to have participated in an organized form of adult learning in 2002, did so for job-related reasons.

Chart 3.2

Reasons for participating in adult education and training by job tenure

Percent of employed population aged 16 to 65 participating in adult education and training, by reason and job tenure, Canada, 2003



Source: Adult Literacy and Life Skills Survey, 2003.

The results suggest that a large proportion of Canadians have come to embrace the emergence of the knowledge intensive economy and are ready to upgrade their skills in order to improve and/or maintain their prospects in the labour market. At the same time, it is becoming rare for Canadians to engage in organized learning activities primarily for personal reasons or study for the sake of study.

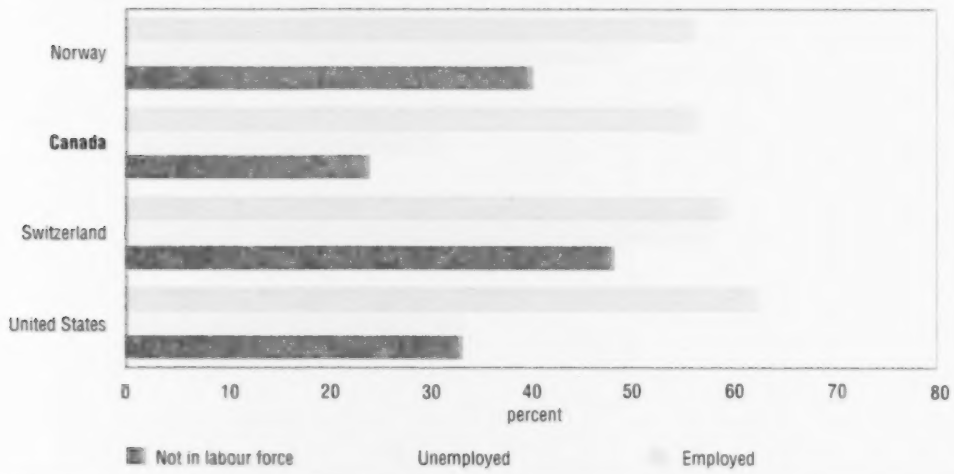
3.2. Labour force status and participation in adult education and training

The relationship between labour force status and participation in adult education is explored in Chart 3.3. The data reveal a similar pattern in all four countries; as expected the highest participation rates can be found among the employed and the lowest among those not in the labour force. The result reflects opportunities for adult education and training awarded by the job, not least the central importance of employer-financed adult education and training. However, Chart 3.3 discloses a distinct difference between the two European countries, Norway and Switzerland, and the North American countries, Canada and the United States. The impact of labour force status is stronger in the latter countries. Thus, the total participation rate among employed Canadians is more than twice as high as among those not in the labour force, 57 versus 24 percent, while the figures for Switzerland are 60 versus 48 percent. The United States diverges from the other three countries in that the participation rate for the unemployed and those not in the labour force is almost identical. These disparities reflect variation in national labour markets and social policies.

Chart 3.3

Participation in adult education and training by labour force status

Percent of population aged 16 to 65 participating in adult education and training, by labour force status, Canada and selected countries, 2003



Countries are ranked by the proportions who are employed.

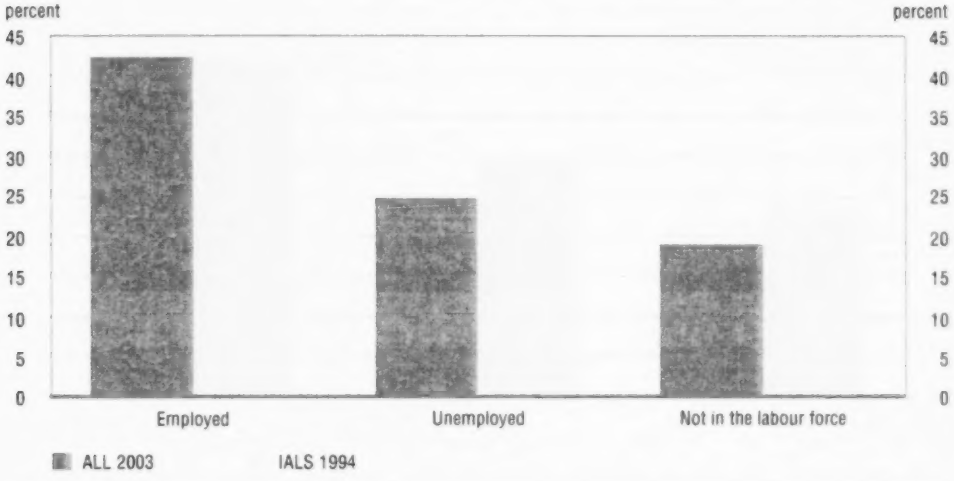
Source: Adult Literacy and Life Skills Survey, 2003.

Chart 3.4 compares the relationship between labour force status and participation in adult education and training in 1994 and 2003. The results suggest that in a time when the possession of relevant skills is widely seen as being increasingly important for securing a job, the situation for the unemployed and those outside the labour force has deteriorated. As shown in Chart 3.4, in 1994, 23 percent of those not in the labour force and 29 percent of the unemployed participated in a course or programme. By 2003 the figures had shrunk to 19 and 25 percent respectively. This might partly be explained by changes to the unemployment insurance scheme that has made it more difficult for some groups to get access to labour market training. The findings mirror the reduction in direct government support for adult education and training that was observed in Chapter 1.

Chart 3.4

Comparison of participation rates by labour force status between the IALS and ALL survey

Percent of population aged 16 to 65 receiving adult education and training, by labour force status, Canada, IALS 1994 and ALL 2003



Source: Adult Literacy and Life Skills Survey, 2003.

3.3. Impact of job and workplace characteristics on adult learning

There is a considerable body of literature that addresses how the structure of work facilitates or constrains individual training opportunities (Brown, Green and Lauder, 2001; Illeris, 2004; Livingstone, 2005). Analyses of how firm size, type of industry, occupation, and supervisory position impact the likelihood of benefiting from employer sponsored education and training are presented in Table 3.1.

Table 3.1

Likelihood of participating and participation rates in employers-sponsored adult education and training by work characteristics

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 participating in employer-sponsored adult education and training, by various work characteristics, Canada and selected countries, 2003

	Employer-sponsored participation rate				Unadjusted odds ratios			
	Canada	Switzer-land	Norway	United States	Canada	Switzer-land	Norway	United States
	percent				ratio			
Firm size (Number of employees)								
Less than 20	12	15	27	10	1.0	1.0	1.0	1.0
20 to 99	21	33	35	26	2.3*	2.2*	1.5*	3.1*
100 to 499	32	42	45	28	3.2*	4.0*	2.1*	3.0*
500 to 999	31	31	46	32	3.8*	3.9*	2.0*	3.5*
1000 and over	35	44	48	34	4.4*	4.2*	2.2**	4.2*
Industry type								
Primary	22	15 [1]	71	15 [1]	1.0	1.0	1.0	1.0
High-mid technologies manufacturing	31	39	28	35	1.7*	2.5*	0.3*	2.3
Mid-low technologies manufacturing	18	22	29	16 [1]	1.0	1.4	0.2*	0.9
Knowledge-intensive market service activities	27	31	43	28	1.7*	2.3*	0.4*	1.7
Public administration, defense, education and health	32	32	42	36	2.4*	2.3*	0.4*	2.4**
Other community, social and personal services	25	28	35	20	1.3	1.5	0.3*	1.2
Utilities and construction	22	32	30	18	1.3**	1.9	0.2*	1.0
Wholesale, retail, hotels and restaurants	19	23	32	16	0.8	1.2	0.2*	0.8
Transport and storage	23	40	34	19 [1]	1.4	2.8*	0.3*	1.1
Occupation type								
Goods	22	18	26	15	1.0	1.0	1.0	1.0
Knowledge (expert)	28	34	46	34	1.9*	2.4*	2.2*	2.8*
Managers	32	35	38	36	1.7*	2.2*	1.9*	3.0*
Information (high-skill)	31	39	48	36	1.9*	2.4*	2.4*	3.3*
Information (low-skill)	24	26	41	24	1.3*	1.7*	2.1*	1.8*
Service (low-skill)	16	23	28	19	0.8**	1.4**	1.0	1.3
Supervisory status at main job								
Non-supervisory role	21	25	34	22	1.0	1.0	1.0	1.0
Supervisory status at main job	33	38	42	33	1.8*	1.7*	1.6*	1.7*

	Adjusted odds ratios			
	Canada	Switzer-land	Norway	United States
	ratio			
Firm size (Number of employees)				
Less than 20	1.0	1.0	1.0	1.0
20 to 99	2.3*	2.1*	1.4*	2.9*
100 to 499	3.1*	3.7*	1.9*	2.7*
500 to 999	3.6*	3.5*	1.7*	3.2*
1000 and over	4.2*	3.9*	1.9*	3.9*
Industry type				
Primary	1.0	1.0	1.0	1.0
High-mid technologies manufacturing	1.0	1.2	0.3*	1.1
Mid-low technologies manufacturing	0.7**	1.0	0.2*	0.6
Knowledge-intensive market service activities	1.2	1.2	0.4*	0.8
Public administration, defense, education and health	1.6*	1.5	0.4*	1.1
Other community, social and personal services	1.1	1.2	0.4**	0.8
Utilities and construction	1.3	1.5	0.4**	1.0
Wholesale, retail, hotels and restaurants	0.6*	0.8	0.4*	0.4
Transport and storage	1.1	1.2	0.3*	0.8
Occupation type				
Goods	1.0	1.0	1.0	1.0
Knowledge (expert)	1.2**	1.8*	1.0	1.4
Managers	1.3*	1.8*	0.9	1.8*
Information (high-skill)	1.3*	2.4*	0.9	2.1*
Information (low-skill)	1.2**	1.8*	1.1	1.3
Service (low-skill)	0.8**	1.7*	0.6*	1.1
Supervisory status at main job				
Non-supervisory role	1.0	1.0	1.0	1.0
Supervisory status at main job	1.7*	1.5*	1.4*	1.6*

* p<.01, statistically significant at the level 1 percent level.

** p<.05, statistically significant at the level 5 percent level.

1. Unreliable estimates due to small sample sizes (i.e., less than 30). Use with caution.

Note: Adjusted odds ratios control for: age, gender, education, supervisory role, industry type, firm size, and type of occupation.

Source: Adult Literacy and Life Skills Survey, 2003.

In short these analyses reveal that:

- Despite long standing concerns regarding under-investment in training in small and medium companies, firm size still acts as a strong determinant of participation in employer sponsored adult education and training activities. In all of the countries, those in firms with less than 20 employees have the lowest likelihood of participating. The smallest difference is in Norway where firm size matters relatively little in receiving training that is employer-sponsored. The disadvantage is particularly noticeable in Switzerland, Canada, and the United States, where those in companies with 1,000 employees and over are four times as likely to be supported in their education by the employer, compared to those working in establishments with less than 20 people. As indicated by the comparatively small difference in unadjusted and adjusted odds ratios, other factors like gender, age, education, supervisory role, occupation and type of industry can not explain the impact of firm size on training.
- Supervisory role and occupation have an impact on training but the variations in odds ratios are substantially lower than for firm size.
- The variations in training rates across occupations are smaller than could have been expected. In all countries, those in managerial, knowledge or high skill information occupations are somewhat more likely to receive some form of training that is employer-sponsored.

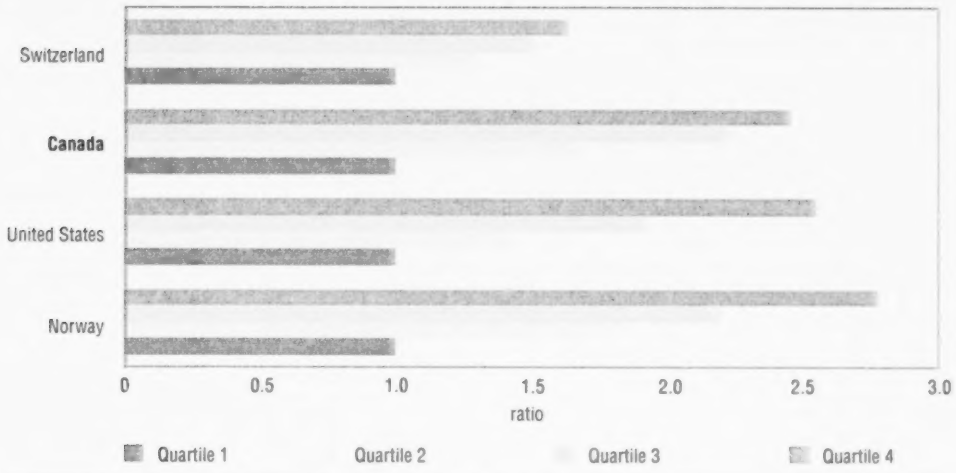
3.4. Skill use and participation in adult learning

Factors like type of occupation, type of industry and the extent of the supervisory role can be seen as proxies for skill demands on the job. Thus, it is of interest to note that a more direct measure, like the extent of engagement in literacy practices at work, is a strong factor predicting the likelihood of receiving employer sponsored training. Controlling for structural differences such as gender, age and educational attainment, Canadian, American and Norwegian employees with extensive engagement in literacy practices at work (quartile 4) are around 2.5 times more likely to enrol in an employer sponsored education and training event than those with sparse engagement in literacy practices at work (quartile 1), see Chart 3.5.

Chart 3.5

Likelihood of participation by literacy practices at work

Adjusted odds ratios showing the likelihood of receiving adult education and training by the extent of engagement in literacy practices at work, employed population aged 16 to 65, Canada and selected countries, 2003



Countries are ranked by the odds ratios of those in Quartile 4.

Note: Adjusted odds ratios control for: age, gender, and education.

Source: Adult Literacy and Life Skills Survey, 2003.

3.5. Skill match-mismatch and participation in adult learning

The first international report of ALL (OECD/Statistics Canada, 2005) demonstrates the expected relationship between subjectively reported literacy and numeracy related practices at work and a person's possession of associated skills as measured in ALL. The higher a person scores on the skills test the more likely they are to engage in these practices. In some instances there is a mismatch between an individual's skills and the extent to which the job task is making demands on these skills. The focus is usually on skills shortages, which refers to the situation when workers are faced with job tasks that exceed their actual skill levels. However, it is also common that employees possess a higher level of literacy and numeracy skills than what is required for them to successfully complete their job tasks (Krahn and Lowe, 1998; Livingstone 1999b). This is referred to as a skills surplus. Finally there are two groups whose skills match the tasks, namely those who are low skilled in jobs with low engagement in literacy and/or numeracy practices, and those who are highly skilled in jobs with high engagement.

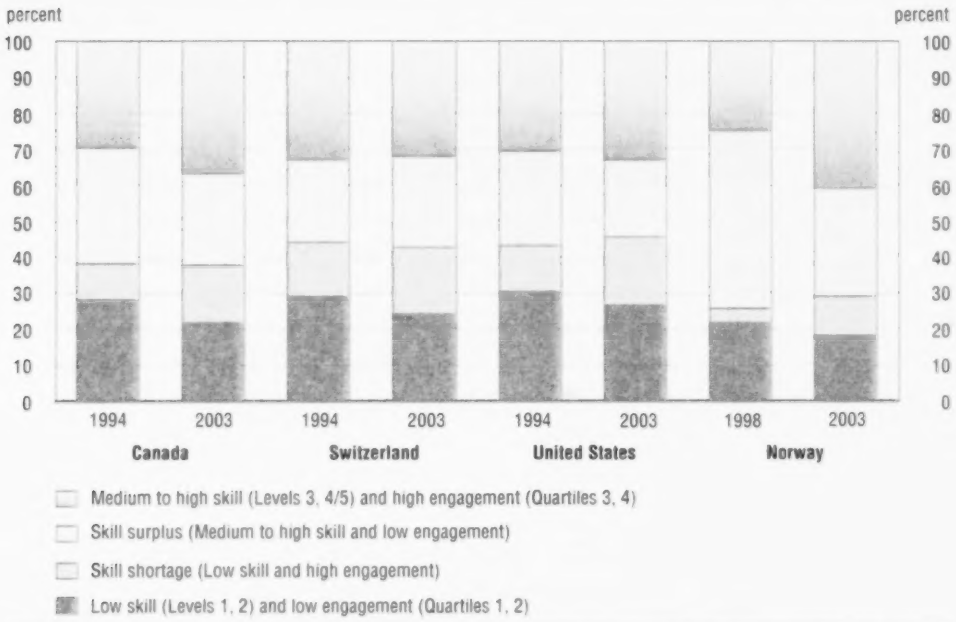
According to the analysis presented in OECD/Statistics Canada (2005), the proportion of matches in the four countries is consistently around 60 percent and the mismatches around 40 percent. In Switzerland and the United States, the groups displaying mismatch are more or less equally divided between those with a skills shortage and those with a skills surplus. In Canada and Norway about 2/3 of the mismatch comes from those with a skills surplus and only 1/3 are classified as having a skills shortage. It should be pointed out that the estimates of skills match-mismatch in this above mentioned analysis using ALL data, as was the case in the Krahn and Lowe (1998) analysis using IALS data, is based on subjective reports of the frequency that a skill is being used and not the actual level at which it is performed.

From the perspective of the emergent knowledge based economy, one might speculate that the distribution of match-mismatch may be changing over time. A comparison of skills-matches in 1994 to 1998 (IALS) and 2003 (ALL) provides some insight into this issue, see Chart 3.6. There are similar trends across all four countries. First, the proportion of the workforce with low skills working in jobs with a low skill demand has shrunk since 1994 while there has been an increase of skilled workers in high engagement jobs. Second, a larger share of the workforce is experiencing a growing skills shortage. This trend is somewhat stronger in Canada and the United States compared to Switzerland. Canada and the United States, particularly the former, also saw a reduction in the proportion classified as having a skills surplus (medium to high skilled workers employed in low engagement jobs) while Switzerland saw a slight increase. The ALL data on match-mismatch support the claims that there is a general broad trend in the labour market towards an up-skilling of existing jobs.

Chart 3.6

Comparison of match-mismatch between skills and skill use at work between the IALS and ALL surveys

Percent of employed population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, document literacy scale, Canada and selected countries, IALS 1994 to 1998 and ALL 2003



Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS 1994, while Norway and the Italian speaking community of Switzerland participated in IALS 1998.
The Italian speaking community of Switzerland is not included in this analysis.
No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

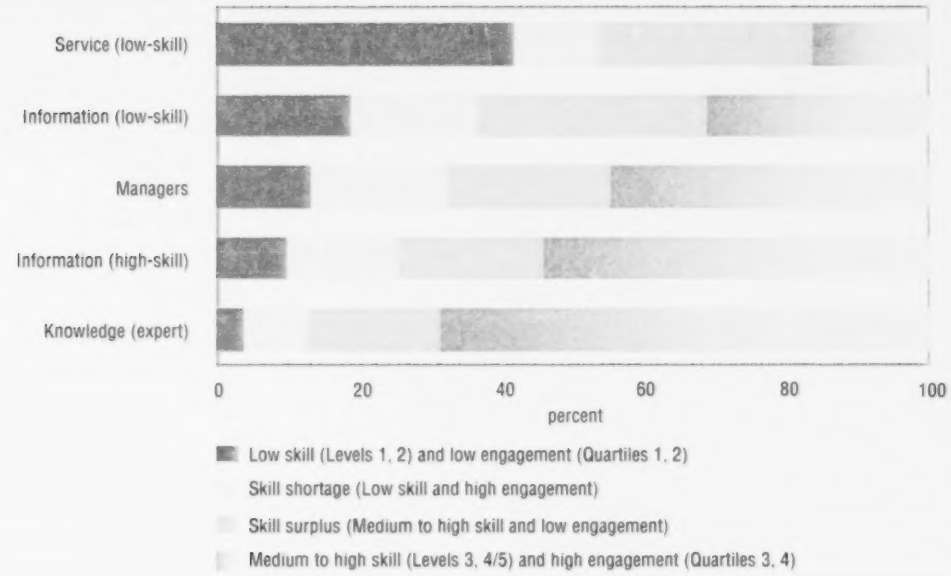
Source: International Adult Literacy Survey, 1994-1998; Adult Literacy and Life Skills Survey, 2003.

Charts 3.7 and 3.8 present a more detailed picture of skill match-mismatch in Canada, focusing on individual occupations. Chart 3.7 shows that a considerable segment of the low skill service and low skill information workforce has a skills surplus. However, according to the data, there is also a noticeable skills surplus among knowledge workers and managers. While some experience a skills surplus, there are others within the same occupation who are faced with a skills shortage. This is true of managers and high as well as low skill information workers, while it is rarer to find skills shortages among knowledge workers.

Chart 3.7

Match-mismatch between skills and skill use at work by type of occupation

Percent of employed force population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, document literacy scale, Canada, 2003



Occupational types are ranked by the proportion in the medium to high skill and high engagement category.

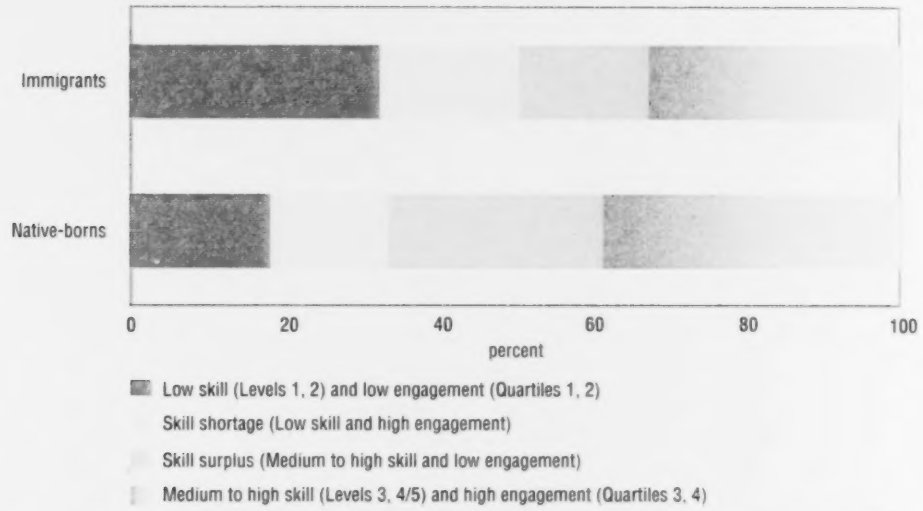
Source: Adult Literacy and Life Skills Survey, 2003.

According to Chart 3.8 there are noticeable differences between immigrants and native-born adults. First, the proportion of matches is larger among the former than the latter. Second, immigrants experience high and low skill matches to about the same extent, while native-born adults mostly experience high skill matches. Third, a larger proportion of immigrants have a skills shortage while native-born adults more often report a skills surplus.

Chart 3.8

Match-mismatch between skills and skill use at work by immigration status

Percent of employed population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, by immigrant status, document literacy scale, Canada, 2003



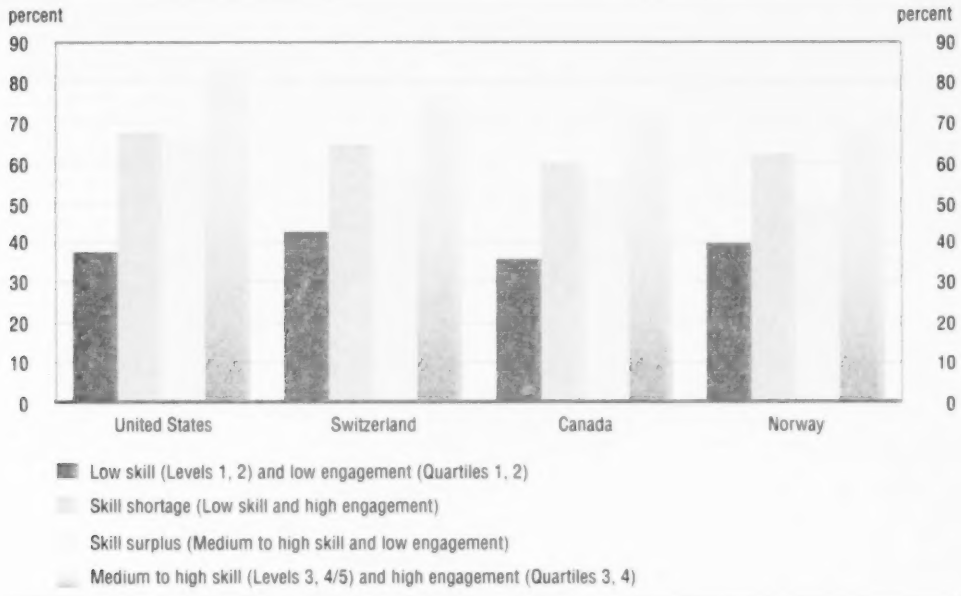
Source: Adult Literacy and Life Skills Survey, 2003.

An important question is how match and mismatch between job tasks and observed skills impacts on the possibilities and readiness to engage in adult education and training. Some insight into this issue can be found in Chart 3.9 which reports total participation rates by distribution of the "match-mismatch" in document literacy skills and its usage at the workplace.

Chart 3.9

Match-mismatch between skills and skill use at work by participation in adult education and training

Percent of employed population aged 16 to 65 receiving adult education and training, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, Canada and selected countries, 2003



Countries are ranked by the proportion in the medium to high skill and high engagement category.

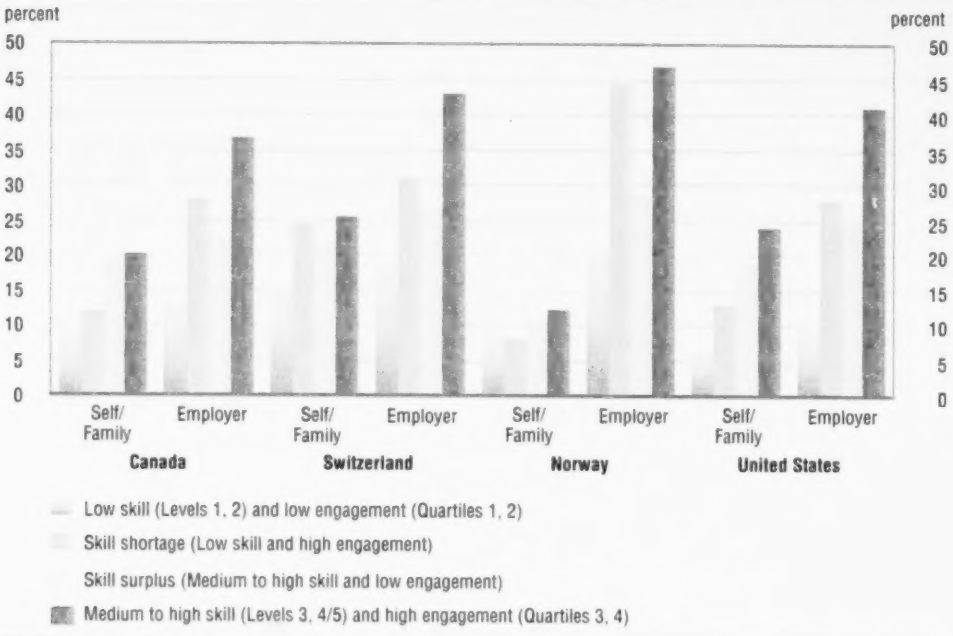
Source: Adult Literacy and Life Skills Survey, 2003.

The data in Chart 3.9 underscore the importance of skills demand for participation in adult education and training. As expected, people in all four countries, with low skills and working in jobs requiring low engagement in literacy, report a notably lower participation rate than those with a skills shortage, skills surplus or those with high skills and in high engagement jobs. Nor is it surprising that the latter group reports the highest participation. The critical finding is that in all four countries, those with a skills shortage participate to the same extent as, and in three of the countries to an even higher extent than, those with a skills surplus. The link between demand and participation is particularly striking in Norway where the participation among those with a skills shortage is substantially higher than among those with a skills surplus. In fact, participation among the former is almost as high as among those who are high skilled and in high engagement jobs. The findings can be explained by the employers' readiness to provide direct financial support for adult education and training to the low skilled in high literacy engagement jobs, see Chart 3.10.

Chart 3.10

Match-mismatch between skills and skill use at work by participation in employer-sponsored adult education and training

Percent of employed population aged 16 to 65 participating in employer-sponsored adult education and training vs percent of population aged 16 to 65 participating in self/family sponsored adult education and training, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, Canada and other selected countries, 2003



Countries are ranked by the proportion in the medium to high skill and high engagement category.

Source: Adult Literacy and Life Skills Survey, 2003.

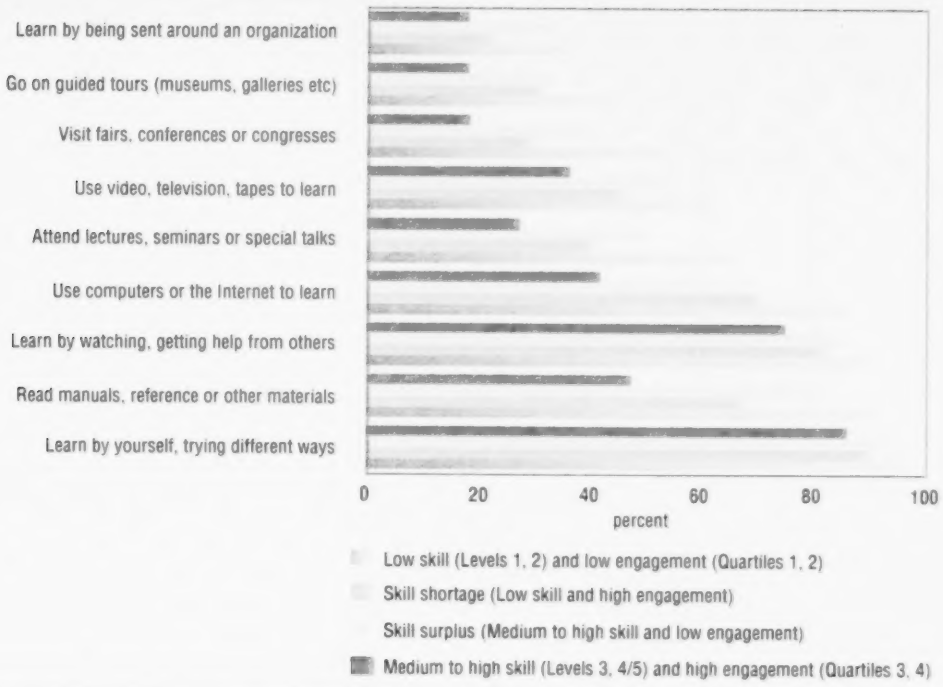
In Norway, 44 percent of participants who are low skilled and in high engagement jobs (i.e., those with a skills shortage) received employer support for adult education and training as compared to 29 percent of those who are high skilled and in jobs with low literacy engagement (i.e., those with a skills surplus). The comparable result for those with high skills and in high engagement jobs is 47 percent. Canada has a similar pattern but the percent of participants receiving employer support is somewhat lower — 28 percent for those with a skills shortage, 22 percent for with a skills surplus and 37 percent for those with high skills and in high engagement jobs. In Switzerland and the United States, those with high skills and in high engagement jobs also have a higher participation rate in employer supported adult learning (43 and 41 percent, respectively) than those with low skills and in high engagement jobs (31 and 28 percent, respectively). In all four countries those with a skills shortage receive employer sponsored adult learning to a greater extent than those with a skills surplus. In contrast, with the exception of Switzerland, those with a skills shortage are less likely to finance themselves than those with a skills surplus.

As displayed in Chart 3.11, skills matches and mismatches not only impact on Canadians' participation in organized forms of adult learning, as shown above, but also on engagement in informal learning. With the exception of very general and non specific activities like learning by watching or by doing, those who are low skilled and in low engagement jobs are the least active in informal learning. In contrast, those who are high skilled and in high engagement jobs report the highest participation rate. Finally, those with a skills shortage are more often engaged in informal learning than people classified as having a skills surplus.

Chart 3.11

Match-mismatch between skills and skill use at work by engagement in informal learning

Percent of employed population aged 16 to 65 engaging in various informal learning activities, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, Canada, 2003


Learn by being sent around an organization
Go on guided tours (museums, galleries etc)
Visit fairs, conferences or congresses
Use video, television, tapes to learn
Attend lectures, seminars or special talks
Use computers or the Internet to learn
Learn by watching, getting help from others
Read manuals, reference or other materials
Learn by yourself, trying different ways
0
20
40
60
80
100
percent
Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)
Skill shortage (Low skill and high engagement)
Skill surplus (Medium to high skill and low engagement)
Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)

Informal learning activities are ranked by the proportion in the high skill, high engagement category.

Source: Adult Literacy and Life Skills Survey, 2003.

Conclusions

The introduction placed the analysis contained in this report in context, introduced the ALL and IALS studies and outlined the definition of adult learning used in this report. Chapter 1 presented comparative estimates of participation in adult education and training among Canada and selected countries, as well as among the Canadian provinces and territories. Chapter 2 examined the level of inequality and looked at changes in the degree of inclusiveness that occurred between the IALS and ALL survey periods. Chapter 3 focused on the relationship between participation in adult learning and work and job characteristics. This conclusion provides an overview and discussion of the main findings.

Overview of main findings

- The findings give a mixed message regarding the acceptance of the principles of adult learning. If the category "other" is included in the total participation rate for 2002 there is a marked increase in the rate of participation in adult education and training between the IALS and ALL survey periods. However, if the comparison is restricted to changes in participation in courses and programmes, it is only Switzerland that can register any noticeable increase in participation rates.
- There are still substantial regional discrepancies in participation in adult education and training in Canada. However, based on a comparison of IALS and ALL the differences have been declining.
- The findings confirm that not only do Canadians report a somewhat lower participation rate than citizens in the three other countries but they also spend less time on their studies.
- Employer finance plays a central role in supporting opportunities to engage in adult learning in all countries. This is particularly the case in Norway where 63 percent of the participants received direct financial support from their employer as compared to 50 percent in Canada.
- Close to one in five Norwegians with low literacy skills get support from the government as compared to just over one in ten in Canada. Government support for those with low literacy skills (Levels 1 and 2) is less frequent in Canada than in the United States.
- Adults within specific vulnerable groups who have medium to high literacy skills (Levels 3 and 4/5) are substantially more likely to participate in adult education and training than adults in the same group but who instead have low literacy skills (Levels 1 and 2). This points to the significance of literacy skills in facilitating individuals capabilities of coping with, and participating in, the emerging knowledge society and information economy, even among adults considered to be the most vulnerable to exclusion. It also suggests the importance and urgency of supporting adult basic skills programmes.
- Canada has witnessed a dramatic decrease in government support for adult education and training of those not in the labour force.
- A large proportion of adults with poor foundation skills (i.e., low literacy skills) are still not being reached by organized forms of adult learning. But there are significant differences in participation patterns among countries, suggesting that differences in adult learning policy do matter.

- The findings confirm the compounding effect of intergenerational educational attainment on readiness to participate in adult education and training.
- There are only minor gender differences in participation in adult education and training. However, a larger share of women compared to men relies on self-financing while the latter more often receive employer-sponsored adult education and training.
- In all countries, native-born adults participate more often than immigrants; the differences are particularly significant in Canada and the United States.
- The results confirm previous findings that more or less everybody is engaged in some form of informal learning.
- The findings show that while everyone seems to be engaged in some form of informal learning activity, vulnerable groups, as identified by a low level of education and low level of literacy skills, report a substantially lower engagement in many of the informal activities for which data is made available by ALL.
- ALL discloses how strongly participation in adult education and training has become linked to the world of work.
- Job and workplace characteristics like firm size, type of industry and occupation, and supervisory position impact on the likelihood of benefiting from employer sponsored education and training, as do levels of engagement in literacy and numeracy practices on the job.

Discussion

The findings presented in this report raise issues about the competitiveness and inclusiveness of the Canadian adult learning system, the challenges in increasing participation, especially among vulnerable groups, and the need to revisit and strengthen public policy on adult learning.

Canada has, thanks to an early expansion of its post-secondary system, had a human capital advantage over most of its economic competitors. This advantage is gradually disappearing as other countries are catching up (see OECD, 2005b). As countries become more similar in the proportion of youth receiving a post-secondary education, any competitive edge will increasingly depend on the extent to which an aging population is able to keep their skills current through engaging in adult education and training. From this perspective, there are several worrying signals about the Canadian performance in adult learning. First, as confirmed in Chapter 1, not only do Canadians report a somewhat lower participation rate than citizens in the three other ALL countries that were included in this study, but they also spend less time on their studies. Second, the Canadian figures on participation in courses and/or programmes have not improved between the 1994 IALS and 2003 ALL survey periods. This finding is supported by results from a trend analysis of Adult Education and Training Surveys from 1993 to 2003 (Rubenson, forthcoming). We can therefore conclude that despite concerns about skill shortages in an evolving knowledge based economy, there has been very little expansion in organized forms of adult learning in Canada.

During the last decade, policy documents (see e.g. OECD, 1996) and scholars (Livingstone, 1999) have stressed that organized forms of adult learning constitute only one aspect of human capital investment and that informal learning is also playing an important role. However, it is important to point out that there are problems using existing survey data to empirically estimate the scope of this contribution. Consequently, existing surveys are not helpful in analysing the extent to which modes of informal learning can be a substitute for formal education. Findings from surveys which do provide data on the extent of informal learning suggest that this is a universal phenomenon. As Betcherman, McMullen and Davidman (1998, p. 46) point out in relation to workplace training, that while the distribution of organized training varies, informal training is more or less even across firms.

Further, ALL suggests that factors like educational attainment, socio-economic status and the workplace have a strong impact on the nature of the informal learning contexts that individuals experience. In other words, while some groups have access to rich informal learning environments, others are left with a rather sparse environment. In order to draw far-reaching policy conclusions based on the distribution of informal learning in Canadian society, we need research that can yield detailed information on the actual knowledge, competencies and skills that people have gained from their engagement in informal learning. Although still contested in the literature, a strong hypothesis is that merely learning in the course of daily life without some systematic prior reinforcement, such as formal education, may not be sufficient for developing competencies that have economic and social value (Svensson, Ellström and Åberg, 2004).

As the policy community has come to realize that adult learning has to serve not only more narrow economic goals, but is also important for supporting equity and social inclusion, the unequal distribution of participation in adult education and training is a growing concern. While all countries have problems recruiting adults with weak foundation skills (e.g., low literacy skills) into organized forms of adult learning, it is important to note that there are significant differences in participation patterns among countries. It is therefore important to reflect on why vulnerable groups like immigrants, the unemployed and those with a low educational attainment are doing substantially better in Norway, for example, than similar groups in Canada. OECD (2005a) highlights several crucial conditions for reaching low-skilled adults and encouraging them to participate, and for which governments can play a useful role. These include: co-financing mechanisms; creating the structural preconditions for better recognizing the benefits of adult learning; improving delivery and quality control; and ensuring policy co-ordination and coherence. Further, the comparatively successful recruitment of the low educated in Norway, as well as in other Nordic Countries, could be a result of having made targeted public funding available for recruiting disadvantaged groups (Rubenson, forthcoming).

Finally, ALL speaks to the central role that work plays in the construction of adults' readiness to engage in adult learning. Almost four out of every five learners report participation in adult learning for job and career related reasons. Further, slightly more than half of the participants have been engaged in some form of employer-sponsored training. The data point to the necessity of anchoring a Canadian strategy on lifelong learning in the world of work. A strategy has to build on the finding that the availability of training opportunities at work is strongly related to the demand structure: the more skills being used, the more likely the employee is to train.

A shift from an economic and human resource strategy based on a low skill/low-wage equilibrium to one that organizes work according to a high-skills equilibrium (Brown, Green and Lauder, 2001) will most likely change low-skilled workers' perceptions of the value of participating in adult education and training. As Rubenson (forthcoming) argues, the exceptionally high and equally distributed participation in adult education and training in the Nordic Countries is related to a nationally promoted high-skills strategy that, through private and public investments encourages participation in broad, general adult education and training.

The present Canadian lifelong learning strategy, which is primarily anchored in a youth initiative, may need to be complemented by an adult learning initiative that recognizes the significant role of the world of work. This may be the case simply because of the relatively small size of Canada's current youth cohorts. In an era where skill demands and the global supply of economically productive skills are both rising, meeting our economic objectives may depend on retraining large numbers of adult workers or on importing skills. A successful strategy should have a dual purpose. First, it should encourage a wider group to participate in adult

education and training. Second, it should stimulate reforms in the organization and nature of work so as to make more expansive use of workers' skills. A comprehensive adult learning strategy for all is as much an issue of labour market policy as it is education policy. Thus a strong interplay between the public and private sectors is necessary. There needs to be recognition that the changing nature of work is altering the long-established division of roles between the public and private sectors.

References

Andres, L., M. et al. (forthcoming). "Educational expectations, parental social class, gender and post-secondary attainment: A ten year perspective." *Youth and Society*.

Becker, G. (1964). *Human capital: A theoretical and empirical analysis with special reference to education*. New York: Columbia University Press.

Benjamin, D., M. Gunderson, Riddell, C. (1998). *Labour market economics : theory, evidence and policy in Canada*. Toronto, McGraw-Hill Ryerson.

Betcherman, G., McMullen, K. and Davidman, K. (1998). *Training for the new economy: A synthesis report*. Ottawa: Canadian Policy Research Network.

Boudard, E. and Rubenson, K. (2003). "Revisiting major determinants of participation in adult education with a direct measure of literacy skills." *International Journal of Educational Research* 39: 265-81.

Bourdieu, P. Cultural reproduction and social reproduction. In J. Karabel, and A.G. Halsey (Eds.), *Power and ideology in education*. New York: Oxford University Press, 1977.

Brown, P., Green, A. and Lauder, H. (2001). *High skills: globalization, competitiveness, and skill formation*. Oxford: Oxford University Press.

Colley, H. Hodkinson, P. & Malcolm, J. (2002). Non-formal learning: mapping the conceptual terrain. A Consultation Report. Retrieved December 7, 2005 from http://www.infed.org/archives/e-texts/colley_informal_learning.htm.

The Conference Board of Canada. (2005). *The skills factor in productivity and competitiveness. How Canada's Sector Councils are helping address the skills and labour needs of* employers. Ottawa: The Conference Board of Canada.

Coulombe, S., Tremblay, J.F., Marchand, S. (2004). Literacy Scores, Human Capital and Growth across Fourteen OECD Countries. Ottawa: Statistic Canada.

European Commission (2000). *A Memorandum on lifelong learning*, http://ec.europa.eu./education/policies/lll/life/memoen.pdf, accessed November 2003.

European Commission (2001). *Communication: Making a European area of lifelong learning a reality*, http://ec.europa.eu/education/policies/lll/life/index_en.html#comm, accessed November 2003.

Esping-Andersen, G. (1996). Positive-sum solutions in a world of trade offs? In G. Esping-Andersen, (Ed.), *Welfare states in transition: National adaptations in global economies*. Oxford: Pergamon Press.

Government of Canada (2005) *A plan for growth and prosperity*. Retrieved February 3, 2006, from http://www.fin.gc.ca/ec2005/agenda/agc2005e.pdf.

Hosmer, D.W. and Lemeshow, S. (1989). *Applied Logistic Regression*. New York: John Wiley and Sons.

Houtkoop and Oosterback, (1997). Determinants of participation in adult education and training. In P. Belanger, Paul & A. Tuijnman (Eds), *New Patterns of Adult Learning: A Six-Country Comparative Study*. Oxford: Pergamon Press.

Hum, D. and W. Simpson (2003). "Job-related training activity by immigrants to Canada." *Canadian Public Policy* 29(4): 469-490.

Illeris, K. (2004). A model for learning in working life. *The Journal of Workplace Learning*, 16(8), pp 431-441.

Jonstone, J.W.C., & Rivera, R.J. (1965). *Volunteers for Learning. A Study of the Educational Pursuits of American Adults*. Chicago: Aldine.

Krahn, H, and G.S. Lowe, G. (1998). *Literacy utilization in Canadian workplaces*. Ottawa: Human Resources Development Canada and Statistics Canada.

Livingstone, D.W. (1999a). Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices. *Canadian Journal for the Study of Adult Education*,13(2), pp. 49-72.

Livingstone, D.W. (199b). *The Education-Jobs Gap: Underemployment or Economic Democracy*. Toronto: Garamond Press: 1999.

Livingstone, D.W. (2005). Expanding conception of work and learning: Recent research and policy implications, in A. Cummings, N. Basica, A. Datnow, A., K. Leithwood, and D.W. Livingstone (Eds.), *International Handbook of Educational Policy Series: Springer International Handbooks of Education*, Vol. 13. Retrieved February 3, 2006, from http://wall.oise.utoronto.ca/resources/Livingstone_Springerbook_ch52.pdf

McKeen, W., and Porter, A. (2003). Politics and transformation: Welfare state restructuring in Canada. In W. Clement & L. Vosko (Eds.), *Changing Canada: Political economy and transformation* (pp. 109-134). Montreal, PQ: McGill-Queen's University Press.

OECD (1961). *Economic growth and investment in education*. Paris: OECD.

OECD (1996). *OECD Economic Surveys – Sweden: Implementing the OECD Jobs Strategy*. Paris: OECD.

OECD (1997). *Literacy skills for the knowledge society*. Paris, OECD.

OECD (2000). *Literacy in the information age: Final report of the international adult literacy survey*. Paris: OECD.

OECD (2001). *Norway: Country note*. Paris: OECD.

OECD (2002). *Thematic Review of Adult Learning: Canada Country note*. Retrieved October 25, 2005 from http://www.oecd.org/dataoecd/51/31/1940299.pdf.

OECD (2004). Employment Outlook. Reassessing the OECD Jobs Strategy. Paris: OECD.

OECD (2005a). *Promoting adult learning*. Paris: OECD.

OECD (2005b). *Education at a glance: 2005*. Paris: OECD.

OECD and Statistics Canada (1995), *Literacy, Economy and Society in the Information Age: Results of the First Final Report on the International Adult Literacy Survey*, Paris and Ottawa.

OECD and Statistics Canada. (2005). *Learning a living. First results of the Adult Literacy and Life Skills Survey*. Paris/Ottawa: OECD/Statistics Canada.

Rubenson, K. (1987). Participation in recurrent education: a research review. In H. Schutze and D. Istance (Eds), *Recurrent education revisited: Modes of participation and financing* (pp. 39-68). Stockholm: Almqvist and Wiksell International.

Rubenson, K. (2001). *Measuring motivation and barriers in the AETS: A critical review. R-01-9-2E.* Ottawa: Human Resources Development Canada Research Paper.

Rubenson, K. (forthcoming). *Determinants of Canadian formal and informal learning. Insights from the Adult Education and Training Survey.* Ottawa: Learning and Policy Directorate, Human Resources and Social Development Canada, Research Paper.

Rubenson, K. Schuetze, H. (eds) (2000). *Transition to the knowledge society.* Vancouver: UBC Institute for European Studies Press.

Statistics Canada (1995). *Canada year book: 1995.* Ottawa: Statistics Canada

Statistics Canada (2001a). *A report on adult education and training in Canada: Learning a living.* Ottawa: Statistics Canada and HRDC.

Statistics Canada (2001b). *Canada year book: 2001.* Ottawa: Statistics Canada

Statistics Canada (2005). *Building on our Competencies: Canadian Results of the International Adult Literacy and Skills Survey*, 2003. Ottawa: Statistics Canada.

Svensson, L., Ellström, P-E. & Åberg, C. (2004). Integrating formal and informal learning at work, *Journal of Workplace Learning*, 16(8), 479-491.

Annex A
Data values for the charts

Table A.1.1

Percent of population aged 16 to 65 participating in courses, programmes and other forms of adult education and training during the year preceding the interview, Canada and selected countries, 2003

	Total	Courses	Programmes	Other
			percent	
Canada	**49**	**25**	**16**	**12**
Norway	53	31	21	7
Switzerland	57	40	20	8
United States	55	21	20	17

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.2

Percent of population aged 16 to 65 receiving adult education and training during the year preceding the interview, with and without "other" forms in ALL, Canada and selected countries, IALS 1994-1998 and ALL 2003

	IALS (total – programmes and/or courses)	ALL (programmes and/or courses only)	ALL (total – programmes, courses, and/or other)
		percent	
Canada	**36**	**36**	**48**
Norway	48	46	53
Switzerland (French)	33	43	48
Switzerland (German)	45	52	61
Switzerland (Italian)	37	32	38
United States	42	38	55

Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS in 1994, while Norway and the Italian speaking community of Switzerland participated in IALS in 1998.

To allow for comparisons between participation rates in IALS and ALL, the calculations for this analysis exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

In ALL, it is possible to derive three categories of adult education and training, namely programmes, courses and a residual category called "other". In IALS there was no possibility for a residual category – all responses were either programmes and/or courses. This is due to a technical design change from IALS to ALL in the adult education module. The implications of this technical change on the comparability of the estimates from 1994-1998 to 2003 are not clear. Are the responses to "other" in 2003 picking up something that was not being picked up in 1994-1998 (i.e., less formalized modes of adult learning) or were these responses forced into programmes and/or courses in 1994? Given this limitation, both are presented as a possibility and caution is advised when comparing the estimates between the two surveys.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

Table A.1.3

Percent of adults at each level of educational attainment, population aged 16 to 65, Canada and jurisdictions, 2003

	Less than upper secondary	Upper secondary and non-tertiary	Tertiary type B	Tertiary type A
			percent	
Alberta	18	40	15	27
British Columbia	18	44	13	26
Canada	**20**	**42**	**14**	**25**
Manitoba	22	47	11	20
New Brunswick	23	51	10	16
Newfoundland and Labrador	29	45	12	14
Nova Scotia	25	43	10	21
Northwest Territories	26	37	15	22
Nunavut	56	25	5	14
Ontario	19	39	15	27
Prince Edward Island	25	41	12	22
Quebec	21	43	12	24
Saskatchewan	18	49	13	19
Yukon	19	40	12	28

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.4

Percent of adults at each level of document literacy, population aged 16 to 65, Canada and jurisdictions, 2003

	Level 1	Level 2	Level 3	Level 4/5
			percent	
Alberta	12	25	38	26
British Columbia	15	21	37	28
Canada	**17**	**28**	**36**	**20**
Manitoba	14	27	43	16
New Brunswick	20	34	34	12
Newfoundland and Labrador	22	31	32	15
Nova Scotia	14	28	40	18
Northwest Territories	17	28	35	20
Nunavut	44	27	20	9
Ontario	17	26	37	19
Prince Edward Island	15	33	35	17
Quebec	20	34	33	14
Saskatchewan	8	25	43	24
Yukon	10	23	41	26

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.5

Percent of adults in each category of labour force status, population aged 16 to 65, Canada and jurisdictions, 2003

	Not in labour force	Unemployed	Employed
		percent	
Alberta	14	4	81
British Columbia	18	9	73
Canada	**17**	**7**	**75**
Manitoba	15	4	81
New Brunswick	21	10	69
Newfoundland and Labrador	24	15	61
Nova Scotia	24	10	66
Northwest Territories	12	8	80
Nunavut	19	20	61
Ontario	15	7	77
Prince Edward Island	19	11	70
Quebec	20	7	73
Saskatchewan	17	4	78
Yukon	12	8	79

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.6

Percent of adults in each type of occupation, employed population aged 16 to 65, Canada and jurisdictions, 2003

	Knowledge (expert)	Managers	Information (high-skill)	Information (low-skill)	Service (low-skill)	Goods
			percent			
Alberta	10	15	14	22	16	23
British Columbia	11	14	14	23	15	23
Canada	**10**	**13**	**14**	**22**	**15**	**25**
Manitoba	8	14	15	22	16	25
New Brunswick	5	11	14	20	20	29
Newfoundland and Labrador	8	11	11	18	18	34
Nova Scotia	6	14	13	22	18	27
Northwest Territories	9	13	14	20	20	24
Nunavut	14	13	9	25	19	20
Ontario	11	13	15	22	15	24
Prince Edward Island	8	12	14	20	14	32
Quebec	10	13	13	23	15	26
Saskatchewan	7	18	17	17	16	25
Yukon	10	19	14	21	20	16

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.7

Percent of population aged 16 to 65 participating in courses, programmes and other forms of adult education and training during the year preceding the interview, Canada and jurisdictions, 2003

	Total	Courses	Programmes	Other
		percent		
Alberta	54	31	17	12
British Columbia	57	31	20	12
Canada	**49**	**25**	**16**	**12**
Manitoba	49	24	17	13
New Brunswick	44	19	13	14
Newfoundland and Labrador	36	14	12	12
Nova Scotia	53	29	18	12
Northwest Territories	54	27	20	11
Nunavut	40	18	17	8
Ontario	50	22	16	14
Prince Edward Island	45	21	15	11
Quebec	43	24	12	10
Saskatchewan	53	27	20	9
Yukon	56	30	21	11

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.8

Changes in the percent of adults aged 16 to 65 in adult education and training programmes and/or courses and the total participation rate between IALS 1994 and ALL 2003, Canada and jurisdictions

	ALL (total – programmes, courses, and other)	ALL (programmes and courses only)	IALS (total – programmes and courses)	Percentage change for total	Percentage change for program/ course
			percent		
Alberta	54	43	50	9	-14
Atlantic region	46	33	29	59	15
British Columbia	57	45	47	21	-4
Canada	**49**	**37**	**37**	**34**	**1**
New Brunswick	44	30	33	36	-7
Ontario	50	36	38	32	-5
Quebec	43	33	29	47	12
Western region	55	43	45	23	-3

Notes: No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus the three territories are excluded from the Canadian average.

The Western region includes Manitoba, Saskatchewan, Alberta and British Columbia. The Atlantic region includes Newfoundland and Labrador, Nova Scotia, New Brunswick and Prince Edward Island.

In ALL, it is possible to derive three categories of adult education and training, namely programmes, courses and a residual category called "other". In IALS there was no possibility for a residual category – all responses were either programmes and/or courses. This is due to a technical design change from IALS to ALL in the adult education module. In this chart, the residual category other is excluded from the 2003 estimates. The implications of this technical change on the comparability of the estimates from 1994-1998 to 2003 are not clear. Are the responses to "other" in 2003 picking up something that was not being picked up in 1994-1998 (i.e., less formalized modes of adult learning) or were these responses forced into programmes and/or courses in 1994? Given this limitation, caution is advised when comparing the estimates between the two surveys.

Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

Table A.1.9

Annual mean hours of study per participant and per capita, by various organized forms of adult learning, population aged 16 to 65, Canada and selected countries, 2003

	Total		Programmes		Courses	
	Per participant	Per capita	Per participant	Per capita	Per participant	Per capita
			hours			
Canada	**291**	**108**	**595**	**94**	**63**	**15.8**
Norway	413	190	895	185	48	24.7
Switzerland	299	146	640	125	61	14.9
United States	332	125	574	114	65	13.7

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.10

Annual mean hours of study per participant, by various organized forms of adult learning, population aged 16 to 65, Canada and jurisdictions, 2003

	Total	Programmes	Courses
		Hours	
Alberta	277	635	47
British Columbia	356	734	47
Canada	**291**	**594**	**64**
Manitoba	279	540	41
New Brunswick	365	743	71
Newfoundland and Labrador	322	588	51
Nova Scotia	376	781	57
Northwest Territories	405	781	74
Nunavut	546	1,058	67
Ontario	246	444	74
Prince Edward Island	275	562	36
Quebec	304	728	72
Saskatchewan	323	620	71
Yukon	304	559	71

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.11

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support and by gender, Canada and selected countries, 2003

	Men			Women			Total		
	Self or family sponsored	Employer sponsored	Government sponsored	Self or family sponsored	Employer sponsored	Government sponsored	Self or family sponsored	Employer sponsored	Government sponsored
	percent			percent			percent		
Canada	**35**	**60**	**7**	**47**	**46**	**9**	**41**	**53**	**8**
Norway	21	67	15	33	60	17	27	63	16
Switzerland	41	63	11	63	42	9	52	53	10
United States	38	55	11	40	51	14	39	53	13

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.12

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and selected countries, IALS 1994 and ALL 2003

	Government		Self		Employer	
	IALS	ALL	IALS	ALL	IALS	ALL
	percent		percent		percent	
Canada	**19**	**8**	**40**	**39**	**47**	**54**
Norway	29	16	20	27	74	63
Switzerland (German and French)	13	10	50	52	44	53
United States	8	13	28	39	63	53

Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS in 1994, while Norway and the Italian speaking community of Switzerland participated in IALS in 1998. The latter is excluded from this analysis due to small sample sizes.

To allow for comparisons between participation rates in IALS and ALL, the calculations for this analysis exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

Source: International Adult Literacy Survey, 1994-1998; Adult Literacy and Life Skills Survey, 2003.

Table A.1.13

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, by low literacy (Levels 1 and 2) and medium to high literacy (Levels 3 and 4/5), document literacy scale, Canada and selected countries, 2003

	Self or family sponsored	Employer sponsored	Government sponsored
		percent	
Canada			
Levels 1 and 2	**38**	**49**	**11**
Levels 3 and 4/5	**42**	**54**	**7**
Norway			
Levels 1 and 2	25	61	19
Levels 3 and 4/5	28	64	15
Switzerland			
Levels 1 and 2	52	49	14
Levels 3 and 4/5	51	55	7
United States			
Levels 1 and 2	34	49	17
Levels 3 and 4/5	42	55	11

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.14

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and jurisdictions, 2003

	Employer sponsored	Self or family sponsored	Government sponsored
		percent	
Alberta	58	38	9
British Columbia	46	49	9
Canada	**53**	**41**	**8**
Manitoba	60	35	7
New Brunswick	60	26	10
Newfoundland and Labrador	54	33	13
Nova Scotia	54	38	11
Northwest Territories	69	22	15
Nunavut	59	13 [1]	28
Ontario	52	41	6
Prince Edward Island	45	47	16 [1]
Quebec	55	40	10
Saskatchewan	57	32	8
Yukon	48	38	21

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.1.15

Percent of population aged 16 to 65 receiving adult education and training, by sources of financial support, Canada and jurisdictions, IALS 1994 and ALL 2003

	Government sponsored		Self or family sponsored		Employer sponsored	
	IALS	ALL	IALS	ALL	IALS	ALL
	percent		percent		percent	
Atlantic region	23	11	42	34	58	55
Canada	**20**	**8**	**46**	**41**	**52**	**53**
Ontario	21	6	44	41	52	52
Quebec	16	10	57	40	43	55
Western region	21	8	42	43	58	52

Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

Table A.1.16

Percent of population aged 16 to 65 who engaged in various informal learning activities during the year preceding the interview, Canada and selected countries, 2003

	Canada	Norway	Switzerland	United States
			percent	
Visit fairs, conferences or congresses	**32**	32	39	27
Attend lectures, seminars or special talks	**41**	47	52	42
Read manuals, reference or other materials	**65**	72	86	65
Learn by being sent around an organization	**24**	23	38	27
Go on guided tours (museums, galleries etc.)	**30**	31	44	30
Use computers or the Internet to learn	**62**	66	59	65
Use video, television, tapes to learn	**48**	45	35	52
Learn by watching, getting help from others	**77**	77	87	79
Learn by yourself, trying different ways	**87**	91	90	90

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.1

Percent of population aged 16 to 65 participating in adult education and training during the year preceding the interview, by document literacy levels, Canada and selected countries, 2003

	Level 1	Level 2	Level 3	Level 4/5
		percent		
Canada	**20**	**36**	**62**	**66**
Norway	33	43	58	64
Switzerland	33	46	65	80
United States	32	42	70	82

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.2

Unadjusted odds ratios showing the likelihood of adults aged 16 to 65 receiving adult education and training, by document literacy levels, Canada and selected countries, 2003

	Canada	Norway	Switzerland	United States
			percent	
Level 1	**1.0**	1.0	1.0	1.0
Level 2	**2.4**	2.1	1.9	3.1
Level 3	**4.3**	4.1	3.4	6.4
Level 4/5	**7.5**	5.0	5.1	13.8

Note: All odds ratios are statistically significant at the level of .01.

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.3

Changes in the percent of adults aged 16 to 65 in adult education and training between IALS 1994-1998 and ALL 2003, Canada and selected countries

	Level 1		Level 2		Level 3		Level 4/5		Total	
	1994-1995	2002-2003	1994-1995	2002-2003	1994-1995	2002-2003	1994-1995	2002-2003	1994-1995	2002-2003
	percent		percent		percent		percent		percent	
Canada	**14.7**	**22.1**	**29.5**	**42.4**	**37.6**	**56.3**	**58.9**	**68.6**	**36.0**	**49.3**
Norway	16.0	29.9	36.7	44.7	50.8	57.5	63.1	63.0	47.8	53.3
Switzerland (French)	19.2	33.2	25.5	43.5	38.9	53.4	47.0	63.0	32.9	47.8
Switzerland (German)	19.7	37.7	39.1	52.8	50.6	69.2	68.4	75.5	44.5	60.8
Switzerland (Italian)	19.8	18.7	27.9	30.9	46.3	51.6	65.0	60.4	36.8	38.2
United States	17.5	24.0	33.1	48.7	51.8	68.2	62.5	79.9	41.7	54.6

Notes: Changes in participation rates are calculated by taking the difference between the ALL and the IALS rates and dividing by the average participation rates of the two periods, i.e., (ALL rate - IALS rate)/((ALL rate + IALS rate)/2).

Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS 1994, while Norway and the Italian speaking community of Switzerland participated in IALS 1998.

To allow for comparisons between participation rates in IALS and ALL, the calculations exclude all full time students under 25 years of age in both IALS and ALL. This is because the IALS data do not allow for a refined distinction between full and part time studies as in ALL.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

Table A.2.4

Percent of population aged 16 to 65 participating in adult education and training during the year preceding the interview, by level of education, Canada and selected countries, 2003

	Less than upper secondary	Upper secondary and non-tertiary	Tertiary type B	Tertiary type A
			percent	
Total				
Canada	**26**	**48**	**59**	**65**
Norway	**32**	**51**	**63**	**72**
Switzerland	**40**	**55**	**69**	**72**
United States	**25**	**50**	**68**	**77**
Programmes				
Canada	**9**	**16**	**15**	**21**
Norway	8	20	24	30
Switzerland	20	18	22	26
United States	10	18	24	29
Courses				
Canada	**10**	**23**	**31**	**37**
Norway	20	28	39	46
Switzerland	22	40	53	52
United States	5 [1]	16	28	37
Other				
Canada	**8**	**12**	**17**	**14**
Norway	7	7	9	6
Switzerland	6 [1]	8	8	8
United States	12	18	19	18

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.5

Percent of population aged 16 to 65 in adult education and training, by various combinations of respondent's own level of education and parents' level of education, Canada, 2003

Intergenerational educational attainment	percent
Respondent: ISCED 1, 2 / Parent: ISCED 1, 2	12
Respondent: ISCED 1, 2	18
Respondent: ISCED 1, 2 / Parent: Higher than ISCED 1, 2	28
Respondent: ISCED 3, 4 / Parent: Lower than ISCED 3, 4	30
Respondent: ISCED 3, 4	36
Respondent: ISCED 3, 4 / Parent: ISCED 3, 4	39
Respondent: ISCED 3, 4 / Parent: Higher than ISCED 3, 4	43
Respondent: ISCED 5, 6 / Parent: Lower than ISCED 5, 6	46
Respondent: ISCED 5, 6	48
Respondent: ISCED 5, 6 / Parent: ISCED 5, 6	52

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.6

Percent of population aged 56 to 75 participating in courses only, programmes and/or courses, all forms of organized adult learning, for personal-interest reasons, and non-employer sponsored, Canada, 2003

Age groups	Total	Programmes and courses	Courses	Personal-interest reasons	Non-employer sponsored
			percent		
56 to 60	34	25	20	35	48
61 to 65	20	12	10	48	53
66 to 70	13	9	8	91	81
71 to 75	7	6	6	81	92

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.2.7

Percent of population aged 16 to 65 who engaged in at least one type of informal learning activity during the year preceding the interview, Canada and selected countries, 2003

	Participated in at least one informal learning activity
	percent
Canada	**93**
Norway	97
Switzerland	98
United States	95

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.1

Percent of participants aged 16 to 65 taking adult education and training for various reasons, by different forms of adult learning, Canada and selected countries, 2003

	Programmes and courses		Programmes		Courses	
	Personal interest	Job-related	Personal interest	Job-related	Personal interest	Job-related
	percent		percent		percent	
Canada	**20**	**82**	**20**	**87**	**24**	**81**
Norway	19	82	23	83	20	82
Switzerland	27	76	25	89	31	73
United States	18	85	20	87	22	84

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.2

Percent of employed population aged 16 to 65 participating in adult education and training, by reason and job tenure, Canada, 2003

	Below 1 year	1 to 5 years	6 to 10 years	11 to 15 years	16 to 20 years	Over 21 years
				percent		
Job-related reasons	85	87	88	88	78	88
Personal-interest reasons	19	17	16	13	26	14

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.3

Percent of population aged 16 to 65 participating in adult education and training, by labour force status, Canada and selected countries, 2003

	Not in labour force	Unemployed	Employed
		percent	
Canada	**24**	**31**	**57**
Norway	40	49	57
Switzerland	48	58	60
United States	33	34	63

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.4

Percent of population aged 16 to 65 receiving adult education and training, by labour force status, Canada, IALS 1994 and ALL 2003

	2003	1994
	percent	
Employed	42	42
Unemployed	25	29
Not in labour force	19	23

Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

Table A.3.5

Adjusted odds ratios showing the likelihood of receiving adult education and training by the extent of engagement in literacy practices at work, employed population aged 16 to 65, Canada, 2003

	Canada	Norway	Switzerland	United States
		ratio		
Quartile 1	**1.0**	1.0	1.0	1.0
Quartile 2	**1.7***	1.8*	1.3	1.5
Quartile 3	**2.2***	2.2*	1.5**	1.9*
Quartile 4	**2.5***	2.8*	1.6*	2.5*

* p<.01, statistically significant at the level 1 percent level.

** p<.05, statistically significant at the level 5 percent level.

Note: Adjusted odds ratios control for: age, gender, and education.

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.6

Percent of employed population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, document literacy scale, Canada and select countries, IALS 1994 to 1998 and ALL 2003

	Canada		Switzerland		United States		Norway	
	1994	2003	1994	2003	1994	2003	1998	2003
	percent		percent		percent		percent	
Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	**28**	**22**	29	24	30	27	22	18
Skill shortage (Low skill and high engagement)	**10**	**16**	15	19	13	19	4	11
Skill surplus (Medium to high skill and low engagement)	**33**	**26**	23	25	26	21	49	30
Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)	**29**	**36**	33	32	30	33	25	41

Notes: Canada, the French and German speaking communities of Switzerland, and the United States participated in IALS 1994, while Norway and the Italian speaking community of Switzerland participated in IALS 1998.

The Italian speaking community of Switzerland is not included in this analysis.

No data were collected from Northwest Territories, Nunavut and Yukon in 1994. Thus to make the population base comparable for Canada, the three territories are excluded from the ALL 2003 estimate.

Source: International Adult Literacy Survey, 1994 to 1998; Adult Literacy and Life Skills Survey, 2003.

Table A.3.7

Percent of employed force population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, document literacy scale, Canada, 2003

	Knowledge (expert)	Managers	Information (high-skill)	Information (low-skill)	Service (low-skill)
			percent		
Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	4	13	10	19	42
Skill shortage (Low skill and high engagement)	9	19	16	18	12
Skill surplus (Medium to high skill and low engagement)	19	23	20	32	30
Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)	69	45	54	31	16

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.8

Percent of employed population aged 16 to 65 whose literacy skills match or mismatch the extent of their engagement in literacy practices at work, by immigrant status, document literacy scale, Canada, 2003

	Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	Skill shortage (Low skill and high engagement)	Skill surplus (Medium to high skill and low engagement)	Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)
			percent	
Native-borns	18	15	28	39
Immigrants	32	18	17	33

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.9

Percent of employed population aged 16 to 65 receiving adult education and training, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, 2003

	Canada	Norway	Switzerland	United States
			percent	
Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	**36**	40	43	38
Skill shortage (Low skill and high engagement)	**60**	62	64	67
Skill surplus (Medium to high skill and low engagement)	**56**	50	58	67
Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)	**73**	68	77	84

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.10

Percent of employed population aged 16 to 65 participating in employer-sponsored adult education and training vs percent of population aged 16 to 65 participating in self/family sponsored adult education and training, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, 2003

	Canada	Norway	Switzerland	United States
			percent	
Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	**13**	21	19	10
Skill shortage (Low skill and high engagement)	**28**	44	31	28
Skill surplus (Medium to high skill and low engagement)	**22**	29	27	25
Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)	**37**	47	43	41

Source: Adult Literacy and Life Skills Survey, 2003.

Table A.3.11

Percent of employed population aged 16 to 65 engaging in various informal learning activities, by match or mismatch between literacy skills and the extent of engagement in literacy practices at work, 2003

	Low skill (Levels 1, 2) and low engagement (Quartiles 1, 2)	Skill shortage (Low skill and high engagement)	Skill surplus (Medium to high skill and low engagement)	Medium to high skill (Levels 3, 4/5) and high engagement (Quartiles 3, 4)
			percent	
Visit fairs, conferences or congresses	18	40	29	55
Attend lectures, seminars or special talks	27	50	40	66
Read manuals, reference or other materials	47	81	68	91
Go on guided tours (museums, galleries etc.)	18	33	31	43
Use computers or the Internet to learn	42	68	70	86
Use video, television, tapes to learn	36	56	46	62
Learn by watching, getting help from others	75	85	82	90
Learn by yourself, trying different ways	86	94	90	97
Learn by being sent around an organization	18	32	23	37

Source: Adult Literacy and Life Skills Survey, 2003.

Annex B
Supplementary data tables

Table B.1.1

Profile of adult population aged 16 to 65 who participated in various forms adult education and training or not at all, by demographic, educational, and occupational characteristics, Canada, 2003

	Non-participants	Programme and/or course participants	Other participants
		percent	
Age			
16 to 25	11	12	11
26 to 35	18	28	23
36 to 45	25	29	29
46 to 55	23	23	26
56 to 65	22	8	11
Gender			
Women	49	50	52
Men	51	50	48
Educational attainment levels			
Less than upper secondary	29	9	12
Upper secondary and non-tertiary	43	40	41
Tertiary type B	11	15	19
Tertiary type A	17	35	28
Document literacy levels			
Level 1	25	7	10
Level 2	31	23	27
Level 3	31	42	40
Level 4/5	12	29	23
Industry types			
Agriculture, hunting, forestry and fishing	5	3	2
Mining and quarrying	1	1	2
Manufacturing	18	13	15
Electricity, gas and water	1	1	1
Construction	7	4	4
Wholesale, retail, hotels and restaurants	26	19	19
Transport, storage and communication	7	6	6
Finance, insurance, real estate and business services	14	16	16
Community, social and personal services	22	37	36
Labour force status			
Not in labour force	26	9	7
Unemployed	10	5	4
Employed	64	86	89

Source: Adult Literacy and Life Skills Survey, 2003.

Table B.1.2

Percent of participants in adult education and training who received various sources of financial support, by immigrant vs native-born status, Canada, 2003

	Government sponsored		Employer sponsored		Self or family sponsored	
	Native-borns	Immigrants	Native-borns	Immigrants	Native-borns	Immigrants
			percent			
Canada	**8**	**9**	**55**	**43**	**40**	**48**
Norway	15	26	64	51	27	38
Switzerland	9	13 [1]	54	47	52	51
United States	13	12 [1]	55	39	39	45

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

Table B.1.3

Percent of participants in adult education and training who received various forms of financial support, by labour force status, Canada, IALS 1994 vs ALL 2003

	Self or family sponsored		Government sponsored	
	IALS 1994	ALL 2003	IALS 1994	ALL 2003
	percent		percent	
Employed	44	36	15	6
Unemployed	39	50	38	33
Not in labour force	58	66	42	20

Source: International Adult Literacy Survey, 1994; Adult Literacy and Life Skills Survey, 2003.

Table B.1.4

Percent of population aged 56 to 75 participating in various forms of adult education and training during the year preceding the interview, by various demographic, educational, occupational and other characteristics, Canada, 2003

	Total	Programme and/or course
		percent
Education		
Less than upper secondary	8	5
Upper secondary and non-tertiary	22	15
Tertiary type B	34	23
Tertiary type A	41	31
Labour force status		
Not in labour force	12	9
Unemployed	11 [1]	10 [1]
Employed	38	26
Occupational types		
Knowledge (expert)	41	31
Managers	23	16
Information (high-skill)	42	31
Information (low-skill)	39	29
Service (low-skill)	24	14
Goods	24	15
Gender		
Women	21	15
Men	20	13
Reading engagement outside work		
Quartile 1	16	10
Quartile 2	23	14
Quartile 3	40	29
Quartile 4	41	31
Intensity of internet use		
Quartile 1	14	9
Quartile 2	41	26
Quartile 3	43	34
Quartile 4	48	34
Intensity of computer use for task oriented purpose		
Quartile 1	13	8
Quartile 2	33	23
Quartile 3	45	32
Quartile 4	58	43
Social income support status		
Did not receive any	21	14
Received	16	13
Total household income levels		
$0 to $20,000	10	7
$20,001 to $40,000	16	10
$40,001 to $60,000	24	16
$60,001 to $80,000	29	20
$80,001 to $100,000	33	26
$100,001 and over	49	34

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Source: Adult Literacy and Life Skills Survey, 2003.

Table B.1.5

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 receiving adult education and training, by gender, Canada and jurisdictions, 2003

	Participation rate		Unadjusted odds		Adjusted odds	
	Women	Men	Women	Men	Women	Men
	percent		ratio		ratio	
Total						
Alberta	53	56	1.0	1.0	1.0	1.0
British Columbia	57	57	1.2	1.0	1.4**	1.0
Canada	**50**	**49**	**1.1****	**1.0**	**1.2**	**1.0**
Manitoba	50	49	1.1	1.0	1.3**	1.0
New Brunswick	46	43	1.0	1.0	0.9	1.0
Newfoundland and Labrador	34	38	0.9	1.0	1.0	1.0
Northwest Territories	58	50	1.2	1.0	1.3*	1.0
Nova Scotia	55	51	1.2	1.0	1.3*	1.0
Nunavut	43	37	1.1	1.0	1.3	1.0
Ontario	52	47	1.1	1.0	1.3	1.0
Prince Edward Island	46	43	1.0	1.0	1.0	1.0
Quebec	43	43	1.0	1.0	1.2*	1.0
Saskatchewan	48	57	1.1	1.0	1.1	1.0
Yukon	59	52	1.3**	1.0	1.2	1.0
Programmes						
Alberta	15	19	0.9	1.0	0.9	1.0
British Columbia	20	20	1.2	1.0	1.3	1.0
Canada	**16**	**16**	**1.1**	**1.0**	**1.1***	**1.0**
Manitoba	18	16	1.1	1.0	1.1	1.0
New Brunswick	13	13	0.8	1.0	0.9	1.0
Newfoundland and Labrador	11	13	0.8	1.0	0.9	1.0
Northwest Territories	23	18	1.1	1.0	1.2	1.0
Nova Scotia	19	16	1.2	1.0	1.2	1.0
Nunavut	21	13 E	1.8	1.0	2.0	1.0
Ontario	16	16	1.0	1.0	1.1	1.0
Prince Edward Island	16 E	14 E	1.0	1.0	0.8	1.0
Quebec	12	12	1.1	1.0	1.1	1.0
Saskatchewan	16	24	1.1	1.0	1.0	1.0
Yukon	19	24	1.0	1.0	1.0	1.0
Courses						
Alberta	31	31	1.1	1.0	1.2	1.0
British Columbia	32	31	1.1	1.0	1.2	1.0
Canada	**26**	**24**	**1.1****	**1.0**	**1.2**	**1.0**
Manitoba	26	21	1.2*	1.0	1.4	1.0
New Brunswick	20	19	0.9	1.0	0.9	1.0
Newfoundland and Labrador	14	14	1.0	1.0	1.1	1.0
Northwest Territories	30	25	1.3	1.0	1.3	1.0
Nova Scotia	30	29	1.0	1.0	1.1	1.0
Nunavut	18	19	0.8	1.0	1.0	1.0
Ontario	24	21	1.1	1.0	1.3	1.0
Prince Edward Island	19	22	0.8	1.0	0.9	1.0
Quebec	24	24	1.0	1.0	1.2	1.0
Saskatchewan	25	28	1.0	1.0	1.1	1.0
Yukon	29	30	1.1	1.0	1.0	1.0

Table B.1.5

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 receiving adult education and training, by gender, Canada and jurisdictions, 2003 (concluded)

	Participation rate		Unadjusted odds		Adjusted odds	
	Women	Men	Women	Men	Women	Men
	percent		ratio		ratio	
Other						
Alberta	12	11	1.0	1.0	0.9	1.0
British Columbia	12	11	1.1	1.0	1.2	1.0
Canada	**13**	**12**	**1.0**	**1.0**	**1.1**	**1.0**
Manitoba	12	14	0.9	1.0	1.1	1.0
New Brunswick	14	14	1.2	1.0	1.2	1.0
Newfoundland and Labrador	12	12	1.1	1.0	1.1	1.0
Northwest Territories	11 [1]	12	0.9	1.0	0.9	1.0
Nova Scotia	12	11	1.2	1.0	1.2	1.0
Nunavut	7 [1]	8 [1]	0.7	1.0	0.8	1.0
Ontario	15	13	1.1	1.0	1.2*	1.0
Prince Edward Island	13 [1]	10 [1]	1.3	1.0	1.3	1.0
Quebec	9	11	0.9	1.0	1.0	1.0
Saskatchewan	12	7	1.2	1.0	1.4	1.0
Yukon	15	7	1.5**	1.0	1.4	1.0

* p<.01, statistically significant at the level 1 percent level.

** p<.05, statistically significant at the level 5 percent level.

1. Unreliable estimate due to small sample sizes (i.e., less than 30). Use with caution.

Note: Adjusted odds ratios control for: age, education, document literacy levels, labour force status, immigrant status, and type of occupation.

Source: Adult Literacy and Life Skills Survey, 2003.

Table B.1.6

Percent, and adjusted and unadjusted odds ratios showing the likelihood, of adults aged 16 to 65 receiving adult education and training, by immigration status, Canada, 2003

	Total			Programmes			Courses			Other		
	Participation rate	Unadjusted odds	Adjusted odds	Participation rate	Unadjusted odds	Adjusted odds	Participation rate	Unadjusted odds	Adjusted odds	Participation rate	Unadjusted odds	Adjusted odds
	percent	ratio		percent	ratio		percent	ratio		percent	ratio	
Native-borns	51	1.2*	1.3*	16	1.1*	1.0**	27	1.3*	1.5*	12	1.0	1.1**
Recent immigrants (less than 5 years)	52	1.7*	1.4*	25	2.3*	1.7	20	1.1**	1.0	10	0.9	0.9
Established immigrants	41	1.0	1.0	13	1.0	1.0	17	1.0	1.0	13	1.0	1.0

* p<.01, statistically significant at the level 1 per cent level.

** p<.05, statistically significant at the level 5 per cent level.

Note: Adjusted odds ratios control for: gender, age, education, document literacy level, labour force status, and occupation type.

Source: Adult Literacy and Life Skills Survey, 2003.

Table B.1.7

Percent of adult population engaging in specific informal learning activities, by educational attainment levels, Canada and selected countries, 2003

	Less than upper secondary	Upper secondary and non-tertiary	Tertiary type B	Tertiary type A
		percent		
Visit fairs, conferences or congresses				
Canada	**14**	**27**	**38**	**52**
Norway	18	29	43	49
Switzerland	21	34	53	69
United States	7	20	30	52
Attend lectures, seminars or special talks				
Canada	**18**	**35**	**48**	**64**
Norway	24	43	63	75
Switzerland	22	49	71	82
United States	12	35	51	71
Read manuals, reference or other materials				
Canada	**39**	**63**	**77**	**85**
Norway	46	71	84	93
Switzerland	75	85	95	97
United States	28	62	78	87
Go on guided tours (museums, galleries etc.)				
Canada	**14**	**26**	**35**	**47**
Norway	20	27	37	46
Switzerland	37	41	49	59
United States	10	24	36	51
Use computers or the Internet to learn				
Canada	**35**	**59**	**73**	**83**
Norway	42	64	79	88
Switzerland	44	58	66	77
United States	28	60	79	90
Use video, television, tapes to learn				
Canada	**36**	**46**	**52**	**59**
Norway	38	43	46	58
Switzerland	37	34	33	44
United States	31	51	59	65
Learn by watching, getting help from others				
Canada	**62**	**77**	**83**	**86**
Norway	61	76	84	87
Switzerland	85	86	88	91
United States	63	77	89	89
Learn by yourself, trying different ways				
Canada	**78**	**86**	**92**	**94**
Norway	82	91	94	96
Switzerland	86	89	91	93
United States	78	91	92	96
Learn by being sent around an organization				
Canada	**13**	**23**	**28**	**31**
Norway	13	21	29	33
Switzerland	28	36	45	47
United States	16	25	34	34

Source: Adult Literacy and Life Skills Survey, 2003.

Note

1. Employers over a certain size (a $250,000 payroll), have been given the choice to pay the tax, 1% of their wage bills, or instead use the tax amount to provide training for their employees (OECD 2002).